Toronto Pearson – Building for the Future!

2020 Airport Construction Code v6.0

Toronto Pearson International Airport

For You. The World.
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Document Governance

The GTAA reserves the right to amend the content of this Airport Construction Code on a regular basis. When issued, amendments are a valid replacement for any part of this Code and effective on the date of issue. Refer to the Document Control page for the current version of the document. The current version of the Airport Construction Code is available on the Toronto Pearson – “Construction” page: https://www.torontopearson.com/en/operators-at-pearson/construction - look under the “Approvals” tab.

All requests for clarification of any information contained in this Code can be directed to the Construction Compliance & Permits Office constructioncompliance@GTAA.com.

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Special thanks to all those who contribute their time to update this Code, which ensures that all Airport requirements are current and makes this Code a reliable resource for everyone working at Toronto Pearson.
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Appendix A

Detail A - 7.7.6.3 - Hoarding Signage
Detail B - 7.7.6.4 - Bilingual “Authorized Personnel Only” Signage
The Airport Construction Code (this Code) is published by the Greater Toronto Airports Authority (GTAA) to provide a comprehensive set of compliance requirements for Construction and Contractor activities in force at Toronto Pearson International Airport (Airport). This Code has been prepared to assist GTAA’s and Tenants’ employees, Consultants, and Contractors with established Airport requirements for the planning/execution of Construction and/or applicable Contractor activities involving Facilities on Airport Lands.

The Construction Compliance & Permits Office (CCPO) represents the principal Authority Having Jurisdiction (AHJ) and is responsible for regulating compliance by applying this Code for applicable activities at the Airport. For the purposes of applying this Code, the CCPO is considered an autonomous entity operating independently of the GTAA. Adherence to this Code and any herein referenced documents is mandatory for all Airport design, Construction initiatives and any other activities where specific requirements are determined to be relevant to the scope of Work. Understanding and observing the procedures and requirements outlined in this Code by the Project Initiators, Applicants, Consultants and/or Contractors will expedite the undertaking of all applicable activities at the Airport.

Guide to the Use of the Code

This Code specifies the compliance requirements to be included and utilized in the designs for the range of Construction Projects conducted at the Airport. This Code also serves as the central information source for other activities related documents originating within the GTAA, and other AHJs, which should be applied with the understanding that the latest edition of all documents, codes and standards should be used.

This Code is to be read in conjunction with the National Building Code, National Fire Code, National Plumbing Code, the National Energy Code for Buildings, TP312E Aerodrome Standards and Recommended Practices for Airside Areas, and other referenced codes and standards related to specific Project types.

This Code is divided into nine parts and uses a decimal numbering system similar to the National Building Code. The numbering structure is as follows:

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Summary of the Contents of this Code

Part 1: Airport Terminology

Part 1 contains listings of terminology unique to Construction at the Airport. Subsection 1.1.2 is a listing of all defined terms that appear in italics throughout this Code. Section 1.2 lists the Construction Classifications and Development Area Types used at the Airport as defined by the GTAA.

**v6.0 Revisions:** General updates include updated and new defined terms.

Part 2: General Information

Part 2 contains administrative provisions for all Construction Projects. It sets out the expected responsibilities not only of GTAA employees and their respective departments, but also of Consultants and Contractors working at the Airport. It sets the requirements for the required inspections and acceptance of Contractor completed Work, and the required reviews by GTAA’s Independent Code Compliance Consultant (ICCC).

**v6.0 Revisions:** Updates include clarification: of responsibilities of the GTAA and Contractors; of Code Reports or Code Matrix requirements; and of new FAP placard posting requirements for mobile and exterior Places of Work.

Part 3: Approvals

Part 3 contains the requirements for reviews and/or approvals for various stages of Construction. Construction approval involves a process of submissions and reviews prior to commencing Construction.

All Construction-related work involving Airport Facilities requires the Project Initiator of the Work to obtain a Facility Alteration Permit (FAP) from the Construction Compliance & Permits Office (CCPO). The requirements and conditions for issuance of a FAP are stated in this part.

**v6.0 Revisions:** General minor updates included with regards to the FAP process.

Part 4: Design Requirements

Part 4 contains GTAA specific compliance requirements for the design of the entities, systems, and spaces that make up the Airport and includes a compendium of acts, regulations, codes, and standards related to Airport design and Construction.

**v6.0 Revisions:** Update highlights include: clarification for the design of new utilities and verification of existing buried systems thru subsurface utilities engineering (SUE); new requirement for compliance with Accessibility for Ontarians with Disabilities Act (AODA); clarification that demolished and abandoned systems must be dismantled and removed; clarification for the reuse recycled or used materials and equipment; clarifications for structural design and testing; clarification for compliance with NFPA 96 requirements for required access of cooking systems and equipment; and new clarification of GTAA IT systems requirements and responsibilities.

Part 5: Environmental Requirements

Part 5 contains the basic requirements that affect design and Construction at the Airport with respect to the environment. It deals with the environmental review of Construction Projects prior to authorization, regulatory compliance requirements for managing environmental
concerns, and monitoring by the GTAA. One component of the environmental policies of the GTAA is the promotion of sustainable design and Construction, which the GTAA has implemented through the adoption of the Canada Green Building Council - Leadership in Energy and Environmental Design (LEED®) Green Building Rating Systems. Another component is energy conservation in facilities incorporated in design solutions that reduce consumption and the carbon footprint while operating.

v6.0 Revisions: Part 5 has been updated to reflect the new Impact Assessment Act (IAA), which replaced the Canadian Environmental Assessment Act (CEAA) effective August 28, 2019. Also, general updates and clarifications of requirements from GTAA Environment Services have been incorporated.

Part 6: Security/Access Control Procedures

Part 6 contains the requirements for security and access control with respect to Construction. Restricted Area Identity Cards (RAIC), Temporary Security Passes, Temporary Construction Passes, key cards, airside vehicle operation permits (AVOP), escort services, and surveillance requirements are set out in this part.

v6.0 Revisions: General updates and clarifications of requirements from GTAA Corporate Safety and Security Department.

Part 7: Construction Requirements

Part 7 contains Construction requirements as they apply to all Contractors engaged in Construction-related activities at the Airport. It sets out requirements for such items as incident reporting and emergency response procedures, protection of property, material handling, locating utilities, disruption of services and Construction safety provisions. The section on special procedures outlines those procedures unique to the Terminals. Finally, it addresses the roles and responsibilities of all parties involved in coordinating Airport operations with Construction activities.

v6.0 Revisions: Update highlights include:

- 7.2.2 - Reporting Unsafe Conditions – added the requirement to report unsafe conditions to the Project Manager.
- 7.2.5 - Occurrence Reporting to Project Manager – added the requirement for immediate reporting.
- 7.3 - Emergency Planning – added reference to GTAA Facility Control Measures and Evacuation Plan training.
- 7.4.1.3 - H&S Submittal General Requirements – added the requirement to submit OHS Policy and Program to CCPO annually.
- 7.4.4 - Submissions for Maintenance – Removed section.
- 7.4.5.3 - H&S Performance – Updated the monthly reporting requirements to match the TCMS report.
- 7.6.6 – Place of Work Hoarding and Barriers – separated requirements for interior/exterior Work and short duration Work.
- 7.6.16 - Enclosed Spaces – added requirement to assess and document the condition of enclosed ceiling/wall spaces.
- 7.7.3.3 - Utility Locates Procedures – clarified the requirements for locate requests.
- 7.8.2 - Delivery of Equipment and Materials – clarified Contractor responsibilities.
- 7.8.2.3(5) – Deleted – Mobile Equipment Usage on GTAA Property policy does not exist.
- 7.10 - Coordinated Construction Process – expanded on the requirements for a Constructor Coordination Protocol (7.10.2.6(f)).
Part 8: Airside Construction Requirements

Part 8 contains the requirements for Airside Construction in addition to Part 7. It outlines Contractor responsibilities, with respect to operating vehicles, height restrictions, and protecting underground services.

V6.0 Revisions: General updates and clarifications of Airside requirements.

Part 9: Technical Data Records

Part 9 contains the requirements for providing technical data records to the GTAA at the completion of a Project for its infrastructure and asset management. The requirements for submitting Contractor’s As-built Documents, warranties, and maintenance manuals, as well as Consultant’s Record Drawings, are defined and addressed here.

V6.0 Revisions: Specific updates with regards to GTAA’s Enterprise Asset Management System (Maximo).

Appendix A: Details

V6.0 Revisions: Added new Hoarding Details

- For Article 7.7.6.3 – new Detail A – Hoarding Signage
- For Article 7.7.6.4 – new Detail B – Bilingual “Authorized Personnel Only” Signage
1.1 Terms and Definitions

1.1.1 Words and Terms Not Listed

Words and terms used in this Code that are not included in the list of defined terms in this Part shall have the meanings as defined in the National Building Code as amended, or if not so defined, have meanings as are commonly assigned to them in the context in which they are used in this Code, taking into account the specialized use of terms with the various trades and professions to which the terminology applies.

1.1.2 Defined Terms

1. The terms defined hereunder shall apply only to this Code and not definitively to other GTAA documents, except where the term of such documents expressly so provide.

2. The words or terms in italics used in this Code have the following meanings:

- **Abandoned System** means a Building system or underground service which has become redundant and not in use.

- **Activity Notice** means the form completed by the Contractor or the GTAA Project Manager containing all the information required and authorized by the respective Airside, Groundside and/or Terminal Construction Coordinator for the area of the Airport involved.

- **Airport** means all lands and facility improvements within the geographical boundaries of Toronto Pearson International Airport.

- **Airport Areas** means those parts of the Airport Lands that consist of the following land use zones: Airside, Groundside and Terminals.

- **Airport Construction Coordinator** means the Person(s) designated by the GTAA to coordinate the planned activities of Construction in the active Airside, Groundside and Terminal areas of the Airport respecting schedules, closures, notifications and tracking of events to mitigate their impact on the normal operation of the Airport.
**Airport Lands** means those parcels of land leased to the GTAA by *Her Majesty* pursuant to the terms of the *Ground Lease*, as amended from time to time, and all *Buildings, Facility improvements and Structures* now or hereafter located thereon.

**Airport Land Use Plan** means the land use plan prepared by the GTAA pursuant to the *Ground Lease*, as amended from time to time.

**Airport Operations Centre (AOC)** means the *Airport Space* designated as the GTAA command hub for receiving and dispatching all day-of-operations information related to *Airport* activities and incidents and is responsible for notifying and recording events and results.

**Airport Space** means all areas within *Buildings* operated or maintained by the GTAA and specifically designated as *Public Space* and *Service Space*.

**Airside** means all areas contained within the *Restricted Area* delineated by the *Primary Security Line* allocated to aeronautical activities, and under direct operating control by NAV Canada and the GTAA. These areas include, but are not limited to, lands used for runways, taxiways, aprons, *Clear Zones*, access roads, agricultural areas, separation areas, attendant drainage, electrical and electronic systems, as well as *Building* areas identified to be in the *Restricted Area*.

**Airside Activity Program** means the GTAA program that covers *Airside* activities including *Construction/rehabilitation Projects*; routine *Maintenance*; obstacle limitation surface obstructions (e.g. cranes/aerial lifts); and special events (e.g. airshows).

**Applicable Codes and Standards** means the requirements adherent by the GTAA to control matters of *Airport Construction* and includes:

a. the references to regulations, codes and standards within this *Code*, which may be amended from time to time as directed by the *President and Chief Executive Officer*, and

b. any other non-referenced regulations, codes and standards applicable to the construction industry and best practices in the Province of Ontario, except as may otherwise be directed by the *President and Chief Executive Officer* as and when needed.

**Applicant** means a *Tenant, GTAA representative, or any other authorized Person* named on an application submitted to the *Construction Compliance & Permits Office (CCPO)* to initiate the *Facility Alteration Permit (FAP)* process for a specific *Project*. The Applicant can be the *Project Initiator* or a designated *Person i.e. Consultant, Contractor, etc.*

**Application Review Notice (ARN)** means the declaration by the *CCPO* indicating that the application for a *Facility Alteration Permit (FAP)* has been received, that the required reviews have been initiated and/or that additional information must be provided that was with not included with the initial *FAP* application submission.

**Architect** means a *Person* registered and licensed by the Ontario Association of Architects to practice architecture in the Province of Ontario under the *Architects Act* of Ontario.

**As-Built Documents** means the digital (PDF & CADD), intelligent 3D models using BIM and/or printed sets of the *Construction Documents*, marked up by the *Contractor* as the *Construction* progresses, indicating any and all changes to the *Construction*, or any other features of the *Work* that varies from the *Construction Documents*. 
**Authority Having Jurisdiction (AHJ)** means primarily the Construction Compliance & Permits Office (CCPO), as well as any other external agency whose jurisdiction of authority includes the Airport Lands and that is referred to in this Code.

**BIM** means the GTAA building information modeling standards and implementation strategy.

**Building** means any Structure used or intended for supporting or sheltering any use or occupancy.

**Building Space** means all areas within a Building operated by the GTAA and specifically designated as leased or leasable for Tenant improvement and use.

**CATSA** means the Canadian Air Transport Security Agency.

**Civil Work** means all above and below ground non-Building Structures and includes infrastructures such as road and bridge systems, landscaping, paving, utility systems and services, as it relates to Construction of the Airport.

**Clear Zone** means the areas adjacent to Primary Security Line (PSL) fences and barriers where no vehicles, equipment, trailers, materials, or other obstructions of any kind are permitted to be placed.

**Code** means this Airport Construction Code published by the GTAA, as amended from time to time.

**Competent Person** means a Person who is qualified because of knowledge, training and experience to organize the Work and its performance, is familiar with the Occupational Health & Safety Act and the regulations that apply to the Work and has knowledge of any potential or actual danger to health or safety in the Place of Work.

**Construction** means the process of building, erecting, altering, repairing, dismantling, demolishing, structural maintenance, painting, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any Work or undertaking in connection with a Project.

**Construction Compliance & Permits Office (CCPO)** means the entity responsible for verifying compliance of Airport Construction and Contractor safety with relevant regulatory and GTAA compliance requirements. Under the Ground Lease, the CCPO is designated as the Authority Having Jurisdiction (AHJ) for all Construction on Airport Lands.

**Construction Documents** means the drawings, BIM intelligent 3D models, specifications, permits, plans, reports, assessments, etc., prepared for Construction purposes that form an integral part of the Contract Documents for the Construction of the Work by the Contractor.

**Constructor** means a Person who undertakes a Project for an Owner and includes an Owner who undertakes all or part of a Project by itself or by more than one employer.

**Consultant** means a Person identified in the Contract as being the party responsible for the provision of professional design services in relation to a Project. The Consultant is the Architect, Professional Engineer, other designer, or their authorized representatives.

**Contract** means the agreement between parties to perform their respective duties, responsibilities and obligations.
Contract Administrator means the Person designated by the GTAA as the principal liaison between the GTAA and the GTAA or Tenant Project representative and can include the GTAA business agent/representative, or a GTAA functional manager.

Contract Documents means those documents listed in the Contract, as amended and agreed upon by the parties to the Contract.

Contractor means the Person identified in the Contract with the GTAA, the Tenant or any agency operating at the Airport for undertaking and performing the responsibilities of Construction activities.

Critical Area means the actively used area surrounding the Terminals and any other area established by the GTAA to control vehicle and personnel access onto the apron area.

Designer means the Person or entity, including but not limited to an Architect or Professional Engineer, providing design services within the intended scope of a Project.

Design Review Committee means the group of representatives as nominated by the GTAA departments selected for defining and evaluating design requirements of a Project and is also referred to as the “technical review committee” and is often referred to as the “Stakeholders” group.

Emergency Plan means the Contractor’s established procedures for response to emergencies with pre-assigned roles and responsibilities for implementation during an emergency.

Engineering means the engineering department of the GTAA Airport Development & Technical Services, which includes Architectural Services, Facilities Systems Engineering, Airside and Infrastructure Engineering, Engineering Data and the Construction Compliance & Permits Office.

Environmental Services means the environmental services department of the GTAA accountable for environmental matters at the Airport.

Environmental Management System (EMS) means the GTAA’s environmental management system – ISO 14001.

Environmental Review means the review conducted by GTAA Environmental Services for each Project in compliance with the Impact Assessment Act, to define requirements to mitigate the impact of the Project and to confirm that the Project complies with applicable environmental legislation.

Facilities Department means the GTAA departments responsible for the care and performance of the Facility.

Facility means any natural feature and man-made fixture resting on, over or below the Airport Lands, either existing or new and comprises the Airport.

Facility Alteration Permit (FAP) means a written declaration issued by the CCPO authorizing Construction in accordance with this Code, and includes the permit referred to in any Contract, agreement, lease or license of premises on Airport Lands and is commonly called a FAP.

Facility Request Form means the form to be completed by the Tenant who has or will have a lease, license or agreement with the GTAA and is initiating a Project related to the assigned Building Space or Land Parcel.

Fire and Emergency Services (F&ES) means the entity of the GTAA responsible for responding to incidents of fire and emergency matters at the Airport.
Fire Chief means the chief of GTAA Fire and Emergency Services.

Fire Prevention means the division of the GTAA F&ES responsible for the enforcement of the National Fire Code.

General Contractor means the main Contractor responsible for: providing all materials, labour, equipment (vehicles & tools) and services necessary for the Construction of the Project; overseeing the day-to-day activities of a Construction Place of Work; management of vendors, trades and subcontractors; and the communication of required information to all Project involved parties throughout the course of Construction.

General Review Commitment Certificate (GRCC) means the form provided by the CCPO to be completed by the Registered Professional or other Designer of the Project to indicate the areas of responsibility to be undertaken for the design and for providing periodic review of the Construction within the scope of its discipline.

Ground Lease means the lease between Her Majesty as represented by the Minister of Transport, and the GTAA, made as of the second day of December 1996, whereby Her Majesty leased to the GTAA the Airport Lands, as same may be amended, reinstated or supplemented from time to time.

Groundside means all lands and Building areas outside the designated Airside area allocated to the Airport and commercial transportation companies under contract with the GTAA to provide public and private transportation services into and out of the Airport.

Groundside Transportation Services means the GTAA department responsible for ground transportation at the Airport.

GTAA means the Greater Toronto Airports Authority.

GTAA Contractor Safety Pre-Qualification Process means the GTAA process to confirm Contractors are meeting the GTAA-established levels of safety competence and which includes the review and verification of the Contractor’s health & safety policies, procedures and certifications.

GTAA Construction Hoarding and Barriers Guidelines means the GTAA specific requirements for suitable hoarding and barriers separating Construction areas from Building operational areas.

GTAA-maintained means those parts of a Facility in Airside, Groundside and Terminal areas directly controlled by the GTAA to operate and maintain exclusively.

GTAA Project Manager means the Person designated by the GTAA who is responsible for the overall coordination of the Project, and who shall act as the principal liaison between the GTAA and the Project Consultants and Contractors.

Her Majesty means Her Majesty the Queen in Right of Canada.

Hot Work means Work that could produce a source of ignition, such as heat, sparks or open flame. Examples of hot work include welding, brazing, cutting, grinding, soldering, torch-applied roofing or the use of an open flame of any type within the limits of the Airport Lands.

Hot Work Permit Process means the established Contractors’ process of reviews and sign-offs required prior to carrying out any Hot Work.
Include means “include, without limiting the generality of the foregoing”, and “includes”, “including” and similar terms having corresponding meanings.

Independent Code Compliance Consultant (ICCC) means a Registered Professional qualified in interpreting the application of the National Building Code and referenced standards as they apply to Construction and retained by the GTAA as required by the Ground Lease to provide independent third-party document reviews and inspections for such duly regulated Construction.

Independent Construction Safety Consultant (ICSC) means the Person retained by the GTAA to provide independent third-party review of Contractor safety documents and monitoring of the Construction activity on Airport Lands in accordance with the applicable workplace health and safety regulations.

Independent Utility Locating Contractor (IULC) means the Person retained by the GTAA to oversee GTAA’s Utility Damage Prevention Program and to provide independent third party locating of GTAA buried utilities and monitoring of the soil disturbance activity of Contractors on Airport Lands in accordance with industry best practices.

Inspector means the Person(s) designated by the GTAA for monitoring and verifying compliance with the approved Construction Documents and with the applicable requirements of this Code and conditions of the review completed under this Code. The Inspector can be designated GTAA staff, trades, Consultant(s) and/or Contractor(s) who act on behalf and under the jurisdiction of the CCPO.

Issued for Construction Documents refers to a set of bid drawings and specifications that have been modified to include all the changes in the documents due to relevant addenda, selection of alternate pricing options, and other negotiated changes. These are the final documents issued to the Contractor to be used during the completion of a Construction Project.

Land Parcel means all open land that is leased or leasable from the GTAA for exclusive Tenant improvement and use.

Land Use Committee means the group of GTAA representatives that determines the use of a Land Parcel prior to a Project being initiated that will comprise such Land Parcel.

Legal Documents means the printed copies and digital copies of both the Construction Documents and the Record Documents provided to the GTAA by the Consultants or Contractors to the GTAA Project Manager for the Project in accordance with the Ground Lease.

Letter of Undertaking by the Applicant means the form to be completed by the Tenant Project Initiator and submitted to CCPO with a FAP application, confirming that the services of a Registered Professional(s) or other Designer(s) to design the same Project have been engaged.

License to Operate (LTO) means the license entered into between the GTAA and a Person for such Person to provide services at the Airport.

Maintenance means activities that preserve the function of a Building system or equipment which may involve cleaning, adjusting, or the minor renewal of machinery in plant where there is no breakdown to be repaired but does not include activities included in the definition of Construction, and those activities performed on objects included in the definition of Project.

Managed Dataset means the GTAA managed datasets, which comprise of individual CADD files that are maintained as a record of the current condition for each system or engineering
discipline on Airport Lands. There are Building managed datasets and site managed datasets, which are both, required as part of Construction Project submissions.

**National Building Code** means the National Building Code of Canada.

**National Energy Code** means the National Energy Code of Canada.

**National Fire Code** means the National Fire Code of Canada.

**National Plumbing Code** means the National Plumbing Code of Canada.

**Occupancy/Use Permit** means a written declaration issued by the CCPO indicating that the Project has reached a state of completion that will support the intended occupancy and/or use and has fulfilled the requirements of FAP issued and this Code.

**Operations** means the Operations and Customer Experience Department of the GTAA.

**Order to Comply** means an order issued by an Inspector, directing compliance with any provision of this Code or any other Applicable Codes and Standards, which in the opinion of the Inspector, has been contravened during Construction on Airport Lands. Such order may require an immediate response or a response within a specified period as indicated on the order.

**Owner** includes a trustee, receiver, mortgagee in possession, Tenant, lessee, or occupier of any lands or premises used or to be used as a workplace, and a Person who acts for or on behalf of an owner as an agent or delegate.

**Person** means any individual or entity, and includes any trustee, receiver, assignee, or other authorized representative thereof.

**Place of Work** means the designated site or location of the Work (including office, storage, staging, laydown areas, etc.) for which a FAP is issued.

**Preliminary Design Review** means the process used by GTAA Engineering to provide the Project Initiator an initial assessment and defined requirements for the Project allowing the Applicant to proceed with the detailed design for the application for a FAP.

**President and Chief Executive Officer** means the President and Chief Executive Officer of the GTAA, or the authorized designate.

**Primary Security Line (PSL)** means a physical security barrier used to prevent or deter access by unauthorized persons to a Restricted Area. The PSL separates the Restricted Area from Public Spaces accompanied by appropriate signage.

**Professional Engineer** means a Person registered and licensed to practice as a Professional Engineer by Professional Engineers Ontario (PEO) under the Professional Engineers Act, (Ontario). The Professional Engineer is engaged by the Project Initiator to provide consulting services and where external to the GTAA shall possess a valid Certificate of Authorization issued by the PEO.

**Project** means an initiative to design and Construct a Facility to be undertaken by a GTAA or a Tenant representative within the Airport Lands and includes:

- the Construction of a Building, bridge, Structure, industrial establishment, mining plant, shaft, tunnel, caisson, trench, excavation, highway, railway, street, runway, parking lot, cofferdam, conduit, sewer, watermain, service connection, telegraph, telephone or electrical cable, pipe line, duct or well, or any combination thereof,
• the moving of a **Building** or **Structure**, and
• any **Work** or undertaking, or any lands or appurtenances used in connection with **Construction**.

**Project Initiator** means the **Person** requesting or requiring the **Project** based on a need or opportunity and is either the **Tenant** named in a lease or license with the **GTAA** or the **GTAA** representative who initiates the **Project**. For **GTAA Projects** it may be the same **Person** named as the **Applicant** or the **Contract Administrator** or the **Project Sponsor**.

**Project Program of Requirements Document** means the document prepared by the **GTAA** containing the prescribed and specified requirements that are deemed to be specific and relevant to the **Project** being initiated.

**Public Space** means areas reserved for public circulation including aisles, corridors, concourses, and public conveniences including lounges, washrooms, and seating within **Airport Buildings**. Such spaces may also include automated people movers, **UP Express**, elevators, escalators, moving walkways, stairs, and ramps.

**Real Estate Commercial Development** means the department of the **GTAA** responsible for business matters related to the **Airport**, including leases, licenses, and property agreements with **Tenants** of the **GTAA**.

**Record Documents** means the set of drawings, specifications, reports, meeting minutes, permits, testing results, surveys, etc., produced by the **Consultants** representing the total documented record of the final **Work** with the **Construction Documents** amended to reflect all change orders, site instructions, **Contractors' As-Built Documents** and any other variations from the **Construction Documents**.

**Registered Professional** means a person who is an **Architect** as defined herein, or a **Professional Engineer** as defined herein.

**Restricted Area** means that area of the **Airport** restricted to authorized persons only and requiring a **Restricted Area Identity Card (RAIC)**, **Temporary Construction Pass** or **Temporary Security Control Pass** to access.

**Restricted Area Identity Card (RAIC)** means an identity card approved by Transport Canada entitling an individual to access the **Restricted/Critical Areas** of the **Airport** when a need and right is present.

**Service Space** means areas reserved in **Buildings** for rendering public and **Tenant** services as follows:

a. General Services - police, fire protection, first aid, communications, public telephones, lost and found, and public information,

b. Special Services - air passenger security screening and international passenger clearance including immigration, public health, customs and agricultural inspection, or

c. **Building** Services - electrical, mechanical, telephone, public address and computer data equipment rooms, chases and shafts.

**Shop Drawings** mean the drawings, diagrams, illustrations, schedules, performance charts, brochures, product data and other data that the **Contractor** provides to illustrate details of portions of the **Work**.
Space Allocation Committee means the group of GTAA representatives that determines the use of space in GTAA-maintained Buildings prior to a Project being initiated.

Sterile Area means the Restricted Area of a Terminal beyond passenger screening points, access to which is restricted to Persons who have been screened in accordance with the Canadian Aviation Security Regulations.

Stakeholder means Person(s) forming all or part of a user group who occupy, operate, maintain, and/or service a Building or operational area, and represent either the GTAA or a Tenant.

Stop Work Order means a written declaration issued by a GTAA Project Manager, their delegate or an Inspector ordering the Contractor performing Construction to cease performing all or part of the Work until the noted transgression is corrected.

Structure means a type of improvement, whether it be permanent or temporary, resting in, on, under or over land or water, including runways, roads, pipelines, conduits, Buildings and all their component parts and features, freestanding fixtures, appurtenances and equipment.

Substantial Performance means the substantial performance of a Contract as defined under Section 2 of the Construction Act of the Province of Ontario (formerly Construction Lien Act of the Province of Ontario), as amended from time to time.

Temporary Construction Pass means a temporary pass, which allows a Construction employee under escort access to the Restricted Areas.

Temporary Security Control Pass means a temporary three-month pass issued by the Pass Permit Control Office that allows holders to access a Restricted Area, with restrictions.

Tenant means the Person (including the GTAA) named on any lease, license or permit originating from and executed by the GTAA or as assigned to the GTAA by Her Majesty in accordance with the Ground Lease, which allows the improvement and use of Building Spaces, Land Parcels, or any other areas of the Airport.

Tenant Co-ordinator means the Person who coordinates the Tenant Requirements Definition Process also known as the Stakeholders’ Review Process.

Terminal(s) means the Buildings at the Airport identified as Terminal 1 (T1), Terminal 3 (T3), Terminal 3 Satellite (Pier A) and the Infield Concourse (IFC) and specifically the Building areas extending from the front curb to the fixed portion of the passenger loading bridges and from the service levels to the upper most level of each Building.

Toronto Pearson Handbook for Business Partners means the Airport rules and regulations established and published by the GTAA as a document to govern the general conduct of all Persons while on Airport Lands.

Work means the total Construction and related services required by the Contract Documents for which a Facility Alteration Permit (FAP) is issued.
1.2 Airport Construction

1.2.1 Construction Classifications

Construction classifications identified herein are those delineated by the GTAA for the purpose of processing applications for Construction. These classifications do not in any way coincide with occupancy classifications identified in Part 3 of the National Building Code.

Class A—New Building includes a standalone Structure with a specific use or occupancy.

Class B—Additions to an existing Building include a standalone Structure to which a new Structure is added with independent and/or extended Building systems and services.

Class C—Alterations to an existing Building includes a standalone Structure in which portions of the existing Structure(s) or system(s) is removed and replaced with new Construction for the purpose of a similar or new use.

Class D—Improvements in Terminals includes interior alterations to an existing Building Space exclusive to portions of the Terminal(s).

Class E—Additions to Building system(s) includes alterations of or extensions to existing Building systems.

Class F—Groundside Civil includes new installations, additions or alterations to existing aboveground and underground Structures, road and bridge systems, utility systems, site grading, landscaping and all other non-Building Structures.

Class G—Airside Civil includes new installations, additions, or alterations to above-ground and underground utility systems, drainage systems, runways, aprons, taxiways, service roads, tunnels, site grading, landscaping or other non-Building Structures that facilitate aircraft activities in areas under direct operating control by Nav Canada and/or the GTAA.

Class H—Other includes miscellaneous Projects such as signage, advertising, mobile Structures, etc.

1.2.2 Development Area Types

Type 1 includes Land Parcels for Tenant improvement and use.

Type 2 includes Building Spaces for Tenant improvement and use.

Type 3 includes all other Airport Areas controlled, operated or maintained by the GTAA.
General Information

2.1 Scope

2.1.1 Application

1. The scope of this Code applies to the design, Construction and occupancy/use of new Buildings, the alteration, reconstruction, demolition, removal, relocation and occupancy of existing Buildings and the Construction, alteration, removal and use of any other spaces, areas, Structures and systems of the Facility.

2. This Code applies to all Contractor Construction activities conducted at the Airport.

2.1.2 New Buildings

1. The National Building Code and this Code applies to all Buildings covered therein, to achieve compliance for the design, Construction and occupancy of all new Buildings.

2.1.3 Existing Buildings

1. The National Building Code and this Code applies to the alteration, reconstruction, demolition, removal, relocation and occupancy of all existing Buildings covered therein, to achieve compliance for the design, Construction and occupancy of all such Buildings.

2. It is not intended by the GTAA that the National Building Code and this Code be retroactively applied to existing Buildings or portions thereof where no alterations are being made. Exceptions to this requirement may arise where a design solution will require a necessary level of safety for the alteration of a Building and include such requirements considered favourable to both the Consultant and the Authority Having Jurisdiction (AHJ). Refer to Appendix A of the National Building Code for further explanation.

2.1.4 Change of Use and Occupancy

1. Existing Buildings and Building Spaces shall have the following information surveys completed prior to a Facility Alteration Permit (FAP) being issued to authorize the change of use and/or occupancy:
a. a compliance review of the necessary requirements for the new use in accordance with the National Building Code; and
b. a physical condition review that notes defects and deficiencies to be corrected to support the new use;

2 A Person is exempt from the requirement of Sentence (1) to obtain a separate FAP where the change in use of the Building or part of it will result from the proposed Construction and a FAP application has been made to or obtained from the Construction Compliance & Permits Office (CCPO).

3 GTAA Fire Prevention must be notified whenever a space is allocated or has been vacated.

2.1.5 Other Types of Structures

1 Part 4 of the National Building Code applies to a specific list of Structures that may be referenced when applicable.

2 The following types of Structures may be found in this Code where each may refer to a specific standard(s) and requirements:
   a. roadways and parking lots used by vehicles;
   b. bridges and tower structures;
   c. runways, taxiways and apron areas used for aircraft manoeuvring;
   d. sub-grade storage tanks and structures;
   e. storm water control and storage pond grade work;
   f. above grade and sub-grade utility infrastructure;
   g. airfield navigational and lighting systems;
   h. fences, barricades, sound attenuation walls, jet blast barriers; and
   i. other miscellaneous structures.

2.1.6 Interpretation and Clarification

1 All requests for clarification of specific information in this Code shall be directed to the CCPO for determining the formal response to be provided.

2.2 GTAA Organization for Airport Construction

2.2.1 General

1 This Section identifies the organizational roles of GTAA departments that are responsible for, or involved in, Construction at the Airport.

2 It is the responsibility of the Person(s) engaged in Construction or Maintenance activities to contact the Construction Compliance & Permits Office (CCPO) where the level of understanding of the specific requirements needs to be clarified or confirmed before any such Construction or Maintenance activity is started.
2.2.2 GTAA Responsibilities

1. The GTAA is responsible for providing comprehensive oversight of the daily movement and activity within all Airport Areas and to ensure safe, secure and functionally continuous operations for all users of Airport Facilities.

2. The following departments of the GTAA are involved in all matters of Airport Construction:

   a. **Engineering** is responsible for providing:
      
      i. initial assessment and Preliminary Design Review of proposed Projects to define the GTAA requirements,
      
      ii. the review of Project documents for technical conformance, and
      
      iii. review of completed Work for compliance with the Contract Documents.

   b. The CCPO is responsible for issuing Facility Alteration Permits (FAP), monitoring all activities carried out under the FAP in conjunction with Airport operations, and verifying compliance of the completed Work with this Code, all Applicable Codes, and Standards and other Project documents. The CCPO is also responsible for:
      
      i. engaging the Independent Code Compliance Consultant (ICCC) in accordance with Section 2.8 of this Code for all Class A to E Construction.
      
      ii. engaging the Independent Construction Safety Consultant (ICSC) in accordance with Section 7.4 of this Code.
      
      iii. engaging the Independent Utility Locating Contractor (IULC) in accordance with Subsection 7.7.3 of this Code.
      
      iv. confirming the respective Airport Construction Coordinator is aware of the Construction to be authorized by issuing the FAP.
      
      v. involving Fire and Emergency Services (F&ES) and/or other responding firefighting services to review and accept all fire protection equipment and systems installed in all classes of Construction prior to its use and occupancy.
      
      vi. confirming Nav Canada and Transport Canada have given final approval of any Construction that may affect the aircraft operating surfaces and navigation equipment of the Airport.
      
      vii. confirming any other external Authority Having Jurisdiction (AHJ) for reviewing Construction has been involved and given final acceptance of the Construction to be used or occupied.

3. **Terminal** operations is responsible for ensuring that all Construction-related activities comply with the operational regulations and requirements governing the Terminals.
4 Groundside operations is responsible for ensuring that all Construction-related activities comply with the operational regulations and requirements governing Groundside.

5 Airside operations is responsible for ensuring that all Construction-related activities comply with the operational regulations governing Airside. Refer to Part 8 of this Code.

6 GTAA Environmental Services is responsible for monitoring all materials, processes, and procedures involving environmental impacts of Construction and assuring adherence to all governing regulations. Refer to Part 5 of this Code.

7 GTAA Facilities is responsible for making provisions to support and integrate the requirements of Construction and coordinating Airport systems isolation and shutdown scheduling with Contractor requests.

8 GTAA Corporate Safety and Security Department is responsible for access control, security regulation governance and compliance, and administration of Restricted Area Identity Cards (RAIC), Temporary Security Control Passes and Temporary Construction Passes. (Refer to Parts 4 & 6 of this Code).

9 GTAA Airport Development & Construction is responsible for managing all capital Projects and ensuring that their Consultants & Contractors follow all requirements of this Code for Project design & Construction.

2.2.3 Consultant Responsibilities

1 Registered Professionals and other Consultants engaged for the purpose of providing professional services to the GTAA or its Tenants shall be responsible for:

   a. all Work emanating from these services conforming with this Code and all other Applicable Codes and Standards,

   b. performing their duties providing reasonable care, competence, knowledge, skill, and judgment, and

   c. providing professional review of the Construction in accordance with the performance standards of their respective governing professional association(s) as may apply, and as required under their Contract with the GTAA, or agreements with Tenants.

2.2.4 Contractor Responsibilities

1 Contractors engaged for the purpose of providing Construction Work to the GTAA or its Tenants shall be responsible for:

   a. the health and safety of all those that may be engaged in activities within the Place of Work, or be impacted by the Work including, but not limited to noise, dust, etc., and includes workers directly employed, working adjacent to or near members of the public,

   b. all Construction being in conformance with this Code and all other Applicable Codes and Standards,
c. ensuring the Contractors’ employees, subcontractors, and suppliers conform with all GTAA requirements for performing Work at the Airport, and

d. inspecting and highlighting any issues that may alter the scope of Work provided by the GTAA or Tenant prior to accepting the proposed Place of Work.

2.3 Design and Review

2.3.1 Qualifications of Designers

2.3.1.1 Application

1. This Subsection applies to any Architect, Professional Engineer and/or other Consultant engaged by a Contractor, a Tenant or the GTAA for design-related purposes related to Airport Construction.

2.3.1.2 Qualifications

1. Every Person engaged for the purpose of providing design services shall have the same qualifications as are required by the Province of Ontario.

2. If requested by the Construction Compliance & Permits Office (CCPO), such Person shall submit evidence of the same qualifications referenced in Sentence (1) as part of the information submitted with the application for a Facility Alteration Permit (FAP).

2.3.2 Provision of Design Services

1. Except as permitted in Sentence (3), the Construction shall be designed and reviewed during Construction by a Registered Professional(s), or other Designer as required by this Code and the applicable laws and obligations of each professional association.

2. An Architect may provide the services within the practice of Professional Engineering in a Building or a Professional Engineer may provide the services within the practice of architecture in a Building, as required by this Code and applicable laws and regulations, where to do so does not constitute a substantial part of the services provided by the other profession related to the Construction of the Building and is necessary:

   a. for the Construction of the Building and is incidental to the other services provided by the Architect or Professional Engineer, or

   b. for coordination purposes.

3. Where a Building or part thereof is designed by an Architect or a Professional Engineer, or a combination of both, all Construction Documents and any changes thereto shall be prepared by and bear the signature and seal of the Architect, Professional Engineer or both as applicable and which is part of the information submitted with the application for a FAP.
4 The CCPO in its sole discretion may require a National Building Code report or National Building Code matrix be submitted to the CCPO prior to commencing the Project detailed design. Such report or matrix once reviewed by the ICCC and accepted by the CCPO will form the agreement in principal for the application of the National Building Code requirements being utilized for the Project detailed design development.

5 The following elements are required by the GTAA to be designed by a Professional Engineer. Construction Documents and Shop Drawings for such elements submitted for approval shall bear the signature and seal of a Professional Engineer:

a. all Civil Work, site services, or alterations thereto, determined by the CCPO,
b. foundations of a Building or Structure, or alterations thereto,
c. superstructure of a Building or Structure, or alterations thereto,
d. mechanical and/or electrical systems, or alterations thereto,
e. life safety systems, or alterations thereto,
f. elements of a Building or Structure having imposed live and/or dead loads, or
g. elements that impose live or dead loads on a Building or Structure (including applied or attached elements such as signage).

2.3.3 General Review

2.3.3.1 Provision of Services

1 Except as permitted in Sentence (2), a Person who intends to construct or have constructed a Building, Structure or Civil Work required to be designed by an Architect, Professional Engineer, or both, shall ensure that an Architect, Professional Engineer, or both, are retained to undertake the general review of the Construction of the Building in accordance with the performance standards of the Ontario Association of Architects and/or Professional Engineers Ontario.

2 Where the Project scope requires new surface penetrations of any concrete Structures including coring, drilling, chipping, cutting, etc., it will require the Project structural engineer’s assessment and sign-off in compliance with the GTAA Surface Penetration Guidelines.

3 Where design services are provided by a Consultant(s) other than an Architect or a Professional Engineer where permitted by this Code and applicable laws and regulations, such Consultant shall carry out or provide the general review of the Construction.

4 Such Consultants shall forward regular written reports arising from general Project reviews, to the GTAA Project Manager and CCPO.

5 Upon completion of the Construction, the Registered Professional(s) and/or other Consultant(s) providing the general review, as referenced in Sentences (1) and (2) above, shall each submit letters of assurance to the CCCPO, stating that to the best of their knowledge, the Construction has been performed in accordance with this Code, the National Building Code and all other Applicable Codes and Standards.
Such letters of assurance shall bear the signature(s) of the Registered Professional(s), and/or other Consultant(s).

2.3.3.2 Restrictions for General Review

1 Only an Architect may carry out or provide the general review of the Construction of a Building within the limitations stated by the Ontario Association of Architects.

2 Only a Professional Engineer may carry out or provide the general review of the Construction of a Building, Structure or Civil Work within the limitations stated by the Professional Engineers of Ontario.

2.3.3.3 Demolition

1 Where the demolition of a Building or Structure (or any part thereof) may be involved, the Project Initiator of a FAP for such Construction shall retain a Professional Engineer to undertake the general review of the demolition where:
   a. the Building exceeds three storeys in building height or 600 m² in building area,
   b. the Structure includes pre-stressed or post-tensioned members,
   c. it is proposed that the demolition will extend below the level of the footings of any adjacent Building or Structure and occur within the angle of repose of the soil, drawn from the bottom of such footings, or
   d. explosives approved by the GTAA or a laser are to be used during demolition.

2.4 Permits and Inspection

2.4.1 Permits

2.4.1.1 Requirement of a Facility Alteration Permit

1 A Facility Alteration Permit (FAP) is required for all Construction or high operational risk activities on Airport Lands, where a Contractor is performing the Work.

2 A FAP is required for any make safe Work required to bring the space back to base Building prior to returning the space to the GTAA. Make safe Work may include but is not limited to removal of lighting fixtures, equipment and dedicated circuits back to the electrical panel; removal of plumbing fixtures, branch piping and capping back at the lease line or at the main service supply line; purging and removal of gas appliances and branch piping and capping back at the lease line or at the main service supply line.

3 A FAP is required for the demolition of a Building with a description of the structural design characteristics of the Building and the method of demolition included in the application for a FAP to demolish the Building in accordance with the provisions of the National Building Code.

4 No Person shall commence demolition of a Building or any part thereof before the Building has been vacated by the occupants except where the safety of the
occupants has been assessed by the Contractor as not being affected and reviewed by the CCPO.

2.4.1.2 Partial Permit

1. The CCPO may issue a partial permit for any stage of Construction if the following conditions have been established or satisfactorily completed:
   a. compliance with applicable requirements of this Code has been achieved in respect of the stage being proposed to start Construction;
   b. evidence, satisfactory to the CCPO has been presented establishing that unreasonable delays in such stage of Construction would occur if a partial permit is not granted; and
   c. the Applicant agrees in writing with the CCPO to,
      i. assume all associated cost risk in commencing Construction without the benefit of a full review of the completed design by the appropriate departments of the GTAA,
      ii. obtain all necessary approvals including Activity Notices as may be required before any Construction commences,
      iii. submit plans and specifications of the complete Building or Structure to the CCPO.
      iv. at the Applicant’s expense, remove any part of the Building or Structure completed and restore the Place of Work in the manner specified in the Contract if authorization is not obtained or plans submitted in the time set out in the Contract, and
      v. comply with all other conditions as the CCPO considers necessary, including the provision of safety and security for compliance with Sub Clause (iv) above.

2.4.1.3 Permit Posting

1. Where a FAP placard has been issued pursuant to this Code, the Person to whom it is issued shall ensure that the FAP placard is always posted during Construction in a conspicuous location at the Place of Work. Where multiple Places of Work are involved, a request should be made to CCPO to issue duplicate FAP placards for each Place of Work.

2. For mobile Work within a Terminal such as conduit/cabling runs, signage Work, etc., and for applicable exterior site activities Contractors must ensure that a digital copy of the FAP placard can be produced (on cell phone, tablet, or laptop) upon request. Failure to produce a valid FAP placard will result in an immediate stoppage of Work until either a hard or soft copy of the FAP placard can be produced.
2.4.2 Site Documents

1. The Person to whom the FAP was issued shall be responsible for the actions of the Person in charge of the Work to keep and maintain at the Place of Work for review by a GTAA Inspector at any time:
   a. at least one copy of the set of drawings and specifications submitted and approved for the FAP;
   b. a copy of all change orders and site instructions to the Contract;
   c. a copy of all reviewed Shop Drawings;
   d. a copy of all inspection reports prepared by the Registered Professional(s);
   e. copies of all Contractor’s Surface Penetration reviews including applicable documentation, and all completed Hot Work Fire Safety Checklists with properly executed applicable sign-offs.
   f. a copy of all reports and certificates provided by external agencies for the inspection, testing and verification of systems, equipment, products and assemblies of the Work, which shall also be submitted to the CCPO when requested, and as part of the Project close-out documentation, and
   g. the as-built markings by the Contractor of any changes to the Work indicated on the Construction Documents; and
   h. a copy of the health & safety documents.

2.4.3 Notices and Inspections

2.4.3.1 Prescribed Notices

1. The Person to whom a FAP is to be issued shall notify the CCPO, of the readiness of the Contractor to start the Work.
2. The relevant Activity Notice(s) shall be requested by the Contractor and issued by the Airport Construction Coordinator(s) with a copy provided to the CCPO.
3. The Contractor shall contact the Airport Operations Centre (AOC) each day personnel are active at the Airport and adhere to the sign-in procedure.
4. The Contractor shall notify the CCPO by the form(s) provided with a minimum of 5 business days’ notice in advance of the date of any required inspection.
5. Further to Sentence (4), unless otherwise instructed, the Contractor shall notify the CCPO of:
   a. the commencement date of the Construction,
   b. the commencement of any form of soil disturbance for footings, foundations and other sub-grade Structures and services,
   c. the readiness to install underground services,
   d. the substantial completion of the footings, foundations and other sub-grade Structures,
2.4.3.2 Prescribed Inspections

1 An Inspector shall, after receipt of a notice given under Sentence 2.4.3.1(4), undertake the site inspection of the Building or other types of Structure to which the notice relates.

2 When undertaking an inspection required under Sentence (1) above, the Inspector may consider reports concerning whether the building or a part of the Building or other types of Structure complies with this Code.

3 The time periods referred to in Sentence (1) above shall not include weekends, statutory holidays and all other days when the offices of the GTAA are not open for the transaction of business with the public.

2.4.3.3 Rights and Duties of the Inspector

1 An Inspector representing the GTAA may, for inspecting the Work in respect of which a Facility Alteration Permit (FAP) is issued or an application for such permit is
made, enter the Place of Work at any reasonable time without advance notice provided:

a. the Contractor is made aware of the presence of the Inspector upon their arrival by having direct contact with the site superintendent;
b. all safety requirements of the Contractor are followed by the Inspector while at the Place of Work; and
c. the Contractor is made aware of when the Inspector departs.

2 An Inspector representing the GTAA may, for the purpose of inspecting the Work, undertake specific inspections related to compliance requirements of this Code and make assessments pertaining to quality of Work and materials, installation methods and practices, accident and hazard prevention, Airport operational impacts, etc.

3 An Inspector representing the GTAA may, for the purpose of inspecting the Work prior to covering and accepting, undertake and/or request specific tests and demonstrations for foundations and other underground Structures, plumbing and pipe systems, HVAC systems, electrical systems, electronic and communications systems, life safety systems, and similar systems to determine the adequacy of the installations to perform as required.

2.4.3.4 Posting an Order

1 Where an Inspector issues an Order to Comply, Stop Work Order, or other order under this section, the Inspector shall verbally inform the Contractor and then follow-up by sending a digital copy of the order via email to the Contractor, GTAA Project Manager and/or the Project Initiator. Depending of the severity of the circumstance, the Inspector may also affix a copy of the order at the Place of Work. Once an order is posted no Person, except the Inspector shall remove the order once the order is lifted.

2.4.3.5 Order to Comply

1 Where an Inspector finds that any provision of this Code or any Applicable Code or Standard is being contravened, the Inspector may issue an Order to Comply, directing compliance with such provision and may require the order to be carried out immediately or within a reasonable specified period.

2 Prior to issuing such order, the applicable GTAA representative administering either, the Contract, lease or license related to the Work will be contacted to determine the conditions to be included in the order, unless immediate action of Sentence (1) needs to be carried out.

3 Where an Inspector gives an order under this Article, the order shall contain sufficient information to specify the identification of the Applicable Code and Standard being contravened, the nature of the contravention and its location.

2.4.3.6 Stop Work Order

1 Where Work is being carried out unsafely or without the proper safety measures being in place, or without a valid FAP in place as solely determined by the GTAA, an
immediate verbal Stop Work Order may be issued unless the Contractor can immediately address and rectify the situation to the GTAA’s satisfaction.

2 Where an Order to Comply is not complied with within the time specified therein or, where no time is specified, within a reasonable time, as determined by the CCPO, the CCPO may order that all or any part of the Work shall cease, and a Stop Work Order shall be served on such Persons affected thereby and a copy thereof shall be posted at the Place of Work.

3 Prior to issuing such order, the applicable GTAA representative administering either, the Contract, lease or license related to the Work will be contacted to determine the conditions to be included in the order, unless immediate action of Sentence (1) needs to be carried out.

4 Where a Stop Work Order is issued in accordance with Sentence (1), no person shall perform any act of Construction in respect of which the order is made, other than Work necessary to correct the circumstances, which led to the issuance of the order.

2.4.3.7 Powers of a GTAA Inspector

1 For the purposes of an inspection under Articles 2.4.3.5 or 2.4.3.6, and Section 2.8, the Inspector may:

   a. require access to the drawings and specifications of the Work or any part thereof, for inspection purposes and may require information from any Person concerning any matter related to the Work or part thereof;

   b. be accompanied by any Person who has special or expert knowledge of any matter in relation to the Work or part thereof;

   c. alone or in conjunction with such other Person(s) possessing special or expert knowledge, make such examinations, tests, inquiries, request documentation or take such samples or photographs as are necessary for the purposes of the inspections; and

   d. order any Contractor responsible for the Work to conduct such tests and sampling as required to confirm conformance of the Work or parts thereof with the Contract and all Applicable Codes and Standards. Where the test results confirm conformance, the costs of the tests shall be paid by the GTAA. Where the test results indicate non-conformance, the Facility Alteration Permit holder shall pay the costs of such tests and all subsequent re-testing required.

2.4.3.8 Powers of a GTAA Inspector Respecting Unsafe Construction

1 An Inspector may enter upon any Airport Lands or onto any premises on Airport Lands at any time without notice for inspecting any Construction to determine whether such Construction is unsafe and shall have the power to act as follows:

   a. Order to Remedy Unsafe Construction - Where an Inspector finds that any Construction is unsafe, he or she may serve upon the FAP holder a written Order to Comply setting out the reasons why the Construction is unsafe and the remedial steps required to be taken to render the Construction safe and may require the
Order to Comply to be carried out within such time as the Inspector specifies in the order.

b. Prohibiting Occupancy/Use of Unsafe Construction - Where an Order to Comply issued under Sentences 2.4.3.5(1) or 2.8.3(3) is not complied with within the time specified therein, or where no time is specified, within a reasonable time from the noted circumstance(s), the CCPO may prohibit the use or occupancy of the Work by issuing a separate Order to Comply. Such Order to Comply shall be given to the FAP holder and a copy thereof shall be posted at the Place of Work.

2 Prior to issuing such order, the applicable GTAA representative administering either, the Contract, lease or license related to the Work will be contacted to determine the conditions to be included in the order, unless immediate action of Clause (1)(a) needs to be carried out.

3 Where the CCPO has issued an Order to Comply under Sentence 2.4.3.5(1) and considers it necessary for the safety of the public, it may cause the premises to be altered, repaired or demolished to remove the unsafe condition, or take such other action, as it considers necessary for the protection of the public. The Contractor named on the FAP shall be responsible for paying all costs.

2.4.4 Fire and Emergency Services Inspection

1 Where Fire and Emergency Services (F&ES) has reviewed the submitted Construction Documents for which a FAP has been issued, specific responsibility for the inspection of the Construction for fire safety conditions complying with the relevant portions of this Code remains with F&ES.

2.4.5 Environmental Services Inspection

1 Where Environmental Services has reviewed the submitted Construction Documents for which a FAP has been issued, specific responsibility for the inspection for environmental conditions complying with the relevant portions of this Code remains with Environmental Services.

2.4.6 Inspection by Other Authorities Having Jurisdiction

1 Where required by the Applicable Codes and Standards, a representative of an Authority Having Jurisdiction (AHJ) (other than the GTAA) may inspect the Work or portions thereof for which a FAP has been issued, for compliance with Applicable Codes and Standards under its jurisdiction.

2 Contractors and their subcontractors shall provide access to the Work and render all assistance necessary to such AHJ for the purposes of inspection.

2.4.7 Security Inspection

1 Where GTAA Corporate Safety and Security Department has reviewed and approved the submitted Construction Documents for which a FAP has been issued, specific responsibility for the inspection of security conditions complying with the relevant portions of this Code remains with GTAA Corporate Safety and Security Department.
2 Non-compliance of security regulations may result in the suspension of any Construction and/or Work.

2.5 Occupancy/Use of Construction

2.5.1 Conditions for Occupancy/Use

1 Except as authorized by this Code, no Person shall occupy or use, or permit to be occupied or to be used, any Construction or part thereof, until the following conditions have been met:

a. a final inspection of the Construction has been requested of the CCPO,

b. all testing and/or commissioning, demonstrations and inspections, have been performed pursuant to such request,

c. all applicable documentation supporting satisfactory completion of Clause (b) prepared by the Contractor and the Registered Professional(s) and other Consultants,

d. all letters of assurance from Registered Professionals and/or other Consultants have been submitted,

e. any outstanding Orders to Comply issued by the CCPO under Articles 2.4.3.5, 2.4.3.6 or Subsection 2.8.3 have been complied with, and

f. an Occupancy/Use Permit or an equivalent authorization has been issued by the CCPO.

2.5.2 Occupancy/Use of Unfinished Construction

1 Occupancy of a Building or part thereof, or use of other Construction such as Civil Work, which has not been fully completed, may only occur where the CCPO has issued a partial Occupancy/Use Permit for only the part of the Work that is finished for the intention to occupy or use.

2 The CCPO may issue a partial Occupancy/Use Permit where:

a. the structure of a Building is completed up to and including the roof,

b. all enclosing walls of a Building are completed up to and including the roof,

c. all walls, partitions, and guards enclosing the space(s) to be occupied are completed,

d. all required fire separations and closures are completed on all storeys to be occupied,

e. all required exits are completed and fire-separated including all doors, required door hardware, balustrades and handrails from the uppermost floor to be occupied down to grade level (and below if an exit connects with lower storeys),

f. all shafts including closures are completed to the floor-ceiling assembly above the storey to be occupied and have a temporary fire separation at such assembly,
g. temporary closures and/or partitions have been installed to prevent access to parts of the Building and site that are incomplete or still under Construction,
h. floors, corridors, lobbies, and required means of egress are kept free of construction material, debris and/or other hazards,
i. where service rooms are in operation, required fire separations are completed and all required closures installed,
j. all water, plumbing and drainage, and HVAC systems are complete and tested as operational for the storeys to be occupied,
k. required lighting, heating and electrical supply are provided for the suites, rooms and common areas to be occupied,
l. required lighting in corridors, stairways and exits is completed and operational up to and including all storeys to be occupied,
m. required standpipe, sprinkler and fire alarm systems are complete and operational up to and including all storeys to be occupied, together with required proper connections for such standpipes and sprinklers,
n. required fire extinguishers have been installed on all storeys to be occupied,
o. garbage rooms, chutes and ancillary services thereto are completed to the storeys to be occupied,
p. required firefighting access routes have been provided and are acceptable to Fire and Emergency Services (F&ES), and
q. a fire safety plan has been formulated and a copy submitted to the CCPO and accepted by F&ES.

3 Where a Person has occupied part of a Building or space(s) within a Building under this subsection, such Person shall notify the CCPO immediately upon completion of the remainder of the Work subject to the provisions of Sentence (2).

2.6 Defect Liability Period

2.6.1 General

1 The minimum period for identifying defects or deficiencies in the Construction and notifying the Contractor shall be one year from the date of Substantial Performance of the Contract, or from the written acceptance date of specific areas and/or equipment for partial completion, whichever occurs later. Longer periods of time may be stipulated in the Contract Documents and shall govern over this section in such event.

2.6.2 Tenant Construction

1 Except as otherwise provided in the lease agreement or license with the GTAA, title to all permanent equipment, systems, components, fixtures and attachments to GTAA-maintained Buildings or Structures shall upon completion, be transferred to
the GTAA by the Tenant without the execution of any further instrument. Such transfer of title shall be free and clear from all security interests, liens or encumbrances whatsoever. The Tenant’s warranty for such items shall pass to the GTAA at the date of Substantial Performance of the Contract.

2 Tenant Buildings constructed on Land Parcels at the Airport are not required to comply with Sentences 2.6.1.1 unless specified by the GTAA under the conditions of the relevant lease or license agreement.

2.6.3 Warranty Period Inspection

1 The Work completed under a Facility Alteration Permit shall be subject to routine preventive maintenance inspections by the GTAA within GTAA-maintained Airport Areas. Any Work, which does not comply with the warranties described above, shall be reported by written notification to the respective Contractor through the Consultant or the Facility Alteration Permit holder. Within the time set forth in the notice, such defective or deficient item(s) shall be repaired, replaced or otherwise corrected by the Contractor with action satisfactory to the GTAA.

2 Should the Contractor fail to act within the given time period, the GTAA reserves the right to make the necessary repairs and replacements at the expense of the Contractor once notice to this effect has been given.

3 If the GTAA determines that immediate action to make repairs, replacements or other corrections causing emergency conditions or further loss or damage, the GTAA may proceed if necessary, with such action without prior notice to the Contractor, at the expense of the Contractor.

4 The Work completed under a Facility Alteration Permit shall have a final warranty inspection by the GTAA of all Construction under warranty before the warranty period of the Contract expires. Should defective Work exist or be encountered at the time of final inspection, notification shall be given to the Contractor to rectify the defect(s) within a time specified by the GTAA.

5 If a Tenant or a Contractor does not agree with a determination of the GTAA concerning defective Work, they may submit such notice, together with a detailed explanation of their position to their GTAA Business Group representative administering their lease agreement or Contract.

2.6.4 As-Built and Record Documents

1 The GTAA requires that As-Built Documents and Record Documents for a Building, Structure, Civil Work, or any part thereof, must be provided to the CCPO by the Contractor & Project Consultants.

2 Further to Sentence (1) above, designated representatives of the CCPO may enter the Place of Work and make requests for any additional records of the Construction in progress at any reasonable time and with the full cooperation from the Contractor to do so.

3 It is recommended that Tenants maintain in good condition a complete set of Construction Documents which shall include Issued for Construction Documents, As-Built Documents, Operation and Maintenance Manuals, Warranties, and Shop
Drawings as required in Part 9 of this Code for future use in making alterations to the existing Facilities.

2.7 Insurance Requirements

2.7.1 Tenant Initiated Construction

1. Any Tenant initiating authorized improvements to its Building Space or Land Parcel shall provide and maintain adequate insurance coverage in accordance with the respective insurance requirements of the GTAA and as further specified in any lease or license agreement with the GTAA.

2.7.2 GTAA-Initiated Construction

1. Where the Work is being performed pursuant to a Contract directly with the GTAA, the insurance provisions of the Contract shall prevail.

2.8 Independent Code Compliance Consultant

2.8.1 Scope and Application

1. The Independent Code Compliance Consultant (ICCC) is contracted by the GTAA to provide independent third-party professional code compliance assessment and inspection of the life safety aspects of Airport Construction as required by the Ground Lease.

2. The role provided by the ICCC serves as a direct and integral part of the CCPO for Projects that have a scope relevant to a Building or part thereof and as defined by the National Building Code.

3. The ICCC is notified of initiated Projects at the Airport by the CCPO only and further contributes recommendations for issuing the Facility Alteration Permit once code compliance agreement is reached with the Applicant.

4. The role of the ICCC, when engaged directly by the Construction Compliance & Permits Office, is to perform Project examinations of the Construction Documents and field reviews of the Construction to verify compliance with the National Building Code and the National Fire Code including their referenced standards.

5. The responsibility of the ICCC is to represent the Authority Having Jurisdiction on behalf of the GTAA only for matters of the National Building Code and the National Fire Code in determining compliance with respect to Construction.

6. Where requirements stipulated by Fire and Emergency Services (F&ES), the GTAA Risk and Loss Control Department, or GTAA Engineering exceed the requirements of the National Building Code and the National Fire Code, the assessment of the ICCC related to these requirements shall not override such stipulations and the former shall govern.

7. In no event shall the ICCC or any action or inaction of the ICCC restrict, limit, affect, derogate from or in any way delegate to the ICCC any responsibility of a Contractor
or a Tenant under this Code, a Contractor’s Contract with the GTAA, a Tenant’s lease or license agreement with the GTAA or any other contractual obligation of legal duty of care or other obligation that such Contractor or Tenant has or may have to the GTAA.

2.8.2 Design Review

1 When engaged, the ICCC reviews the submitted final design Issued for Construction Documents primarily for compliance of the design with fire protection and life safety provisions/requirements of the Project and prepares Code review comments independent of the CCPO and submits them directly to the Applicant for written responses.

2 Once agreement of these comments has been reached between the ICCC and the Applicant, the ICCC issues a recommendation letter to the Applicant and CCPO. As determined only by the ICCC, deferred agreement to specific comments may be permitted. This is limited to matters involving subsequent provision during the Construction stage, such as Shop Drawings, system testing and certification documentation by the Contractor.

3 The recommendation letter in Sentence (2) is a requisite part for CCPO issuing the Facility Alteration Permit (FAP).

4 A list of the required documentation to be reviewed by the ICCC shall be determined by direct contact with the ICCC by the Applicant. All information submitted to the ICCC shall be copied to the CCPO for its records.

5 The ICCC will review Construction Documents submitted for partial or phased Construction assessment on a case-by-case basis. A complete submission of these documents and information for each phase is necessary for a review to commence.

2.8.3 Construction Review

1 When engaged, the ICCC will conduct periodic field reviews of the Work in order to verify that the Construction is in compliance with the relevant requirements of the National Building Code, with emphasis on the mandatory fire protection and life safety provisions to be completed by the Contractor prior to requesting occupancy/use.

2 A list of the required documentation to be reviewed by the ICCC during the Construction stage shall be determined by direct contact with the ICCC by the Applicant. All information submitted to the ICCC shall be copied to the CCPO for its records.

3 Where the ICCC finds any provision of the National Building Code is being contravened, the ICCC may recommend to the CCPO that an Order to Comply be issued in accordance with Article 2.4.3.5 of this Code.

2.8.4 Occupancy Review

1 When engaged, the ICCC will attend a final inspection meeting and a coordinated occupancy demonstration when requested and confirmed in writing by the Registered Professional and the Contractor that the Construction is ready, to witness
and verify the completion and activation of all fire and life safety systems prior to occupancy or intended use.

2 A list of the required documentation to be reviewed by the ICCC during the final stage of construction shall be determined by direct contact with the ICCC by the Applicant. All information submitted to the ICCC shall be copied to the CCPO for its records.

3 Only after all the above requirements have been completed to the satisfaction of the ICCC will the ICCC provide a written recommendation to the CCPO to issue the Occupancy/Use Permit relative to the occupancy of the Work or part thereof.
3.1 Environmental Review

3.1.1 Scope

1 All Projects on Airport Lands shall be subject to an Environmental Review by the GTAA to meet the requirements of the Impact Assessment Act, which replaced the Canadian Environmental Assessment Act effective August 28, 2019. Information must be submitted at the Preliminary Design Review stage for assessment by the GTAA to determine an environmental status for the Project and any associated activities. The review shall result in a Preliminary Environmental Evaluation, which will address the environmental impact and make recommendations with respect to relevant environmental provisions of Applicable Codes and Standards, and the GTAA policies and procedures. Additional requirements may be developed as the scope and nature of the Project are finalized.

2 Refer to Part 5 of this Code for the detailed requirements of the Environmental Review.

3.2 Preliminary Stakeholders’ Design Review

3.2.1 Review Process

1 Projects to be initiated on Airport Lands may be subject to a Preliminary Design Review by GTAA Engineering and/or applicable Stakeholders.

2 The purposes of the review are to validate the reasons and scope of the Project provided by the Project Initiator at the early initiation stage and to obtain the relevant acceptance, requirements and information from the applicable GTAA departments to allow further defining of the composition and scope of the Project.

3 For GTAA Projects, the GTAA Project Manager is expected to initiate and to coordinate the required reviews by GTAA Engineering and/or applicable Airport Stakeholders. Upon completion of the review, the Project Manager is to prepare the Project Program of Requirements Document, which documents the prescribed and
specified requirements that are deemed to be specific and relevant to the Project being initiated.

4 For Projects initiated by Tenants, the Project Initiator is expected to initiate the review process through their GTAA Business Partner (Real Estate Commercial Development, Food & Beverage, etc.) by submitting a completed Facility Request Form plus supporting information to describe the request.

The GTAA Business Partner through the GTAA Tenant Co-ordinators will initiate the reviews by GTAA Engineering and/or applicable Stakeholders.

5 The Project Initiators may at this stage arrange a preliminary meeting with the CCPO to discuss and determine the specific requirements related to the Facility Alteration Permit process for the proposed Project.

3.2.2 Process Requirements

1 At this stage of the Project, GTAA Engineering requires general information. The Project Initiator shall submit documentation to GTAA Engineering that is comprehensive enough to describe and illustrate the major aspects of the Project.

2 Where the Project involves a Consultant engaged by the Project Initiator, documentation at this stage need only to represent a conceptual/schematic/preliminary level of detail.

3 The following information shall be prepared by the Project Initiator for a Project involving a Building(s):
   a. conceptual sketches or drawings illustrating the proposed Construction and includes diagrams drawn to scale showing the location, plan and/or site context, size, height and appearance, complete with dimensions and notes as required;
   b. an outline specification of the materials, finishes, assemblies, systems, and equipment being considered in the design, and
   c. where applicable, submit a sample board indicating colour and finishes of interior and exterior Building materials to be used, clearly labelled and referenced to the sketches.

4 The Project Initiator shall prepare information for a Project involving Civil Work(s) following the requirements of Clause (3)(a) above.

5 At this stage of requesting Project approval, an assessment by either the Space Allocation Committee or the Land Use Committee should be completed beforehand to ensure that the zoning criteria for the Project on Airport Lands has been considered and accepted.

6 The Project Initiator shall submit each Project to the GTAA Risk and Loss Control Department to complete a risk assessment of the design.
3.3 Facility Alteration Permit (FAP)

3.3.1 General Requirements

1. No *Person* is permitted to engage in any *Construction* activity at the *Airport* without first obtaining a *Facility Alteration Permit (FAP)* from the *Construction Compliance & Permits Office (CCPO)*.

2. An exemption from Sentence (1) may only be requested of the *CCPO* and only for a *Project* that has marginal circumstances explained by a *justification* satisfactory to the *CCPO*.

3. The procedures for obtaining a *Facility Alteration Permit* from the *CCPO* are outlined herein.

3.3.2 Construction Documents

1. Only *Construction Documents* submitted that are indicated, as being one hundred per cent complete will be accepted by the *CCPO* at the time of application for a *FAP*. One hundred per cent is determined as documentation with enough information and instruction describing the scope of the *Project* for the *Contractor* to be able to *Construct* it fully without having any questions or additional information related to what is to be completed.

2. When all the information is received to the satisfaction of the *CCPO*, a *FAP* can be issued when all other conditions to be applied as determined by the *CCPO* and further to that of Subsections 3.3.3 and 3.3.4 have been met to the satisfaction of the *CCPO*.

3.3.2.1 Submission Guidelines—General

1. *Construction* Documents required to apply for a *FAP* shall follow these guidelines, where applicable to the type of *Project* submitted:

2. All drawings shall:
   a. be in a format specified by the *GTAA* at the start of preparing the *Construction Documents*;
   b. be sufficiently comprehensive in information for *Construction* purposes and drawn to scale;
   c. be drawn and fully dimensioned in metric units;
   d. include defined requirements of the *GTAA*;
   e. include relevant requirements of this *Code* and all *Applicable Codes and Standards*;
   f. include the *Project name, drawing title, location/address, date, scale, dimensions, and extent of new Construction relative to existing*; and
   g. be legible in presenting the information with reproductions of original drawings retained by the *Applicant*. 

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3 Location and site plans shall show True North and Construction North. All other plans, including floor plans, reflected ceiling plans, etc., shall show only Construction North. Location and site plans shall also show lease lines, proposed Construction (bold and/or shaded) and existing base Building context where applicable.

4 Specifications shall be in the format specified by the GTAA and shall include all selected materials and systems for the Construction.

3.3.2.2 Submission Guidelines—Class A (New Building)

1 The drawings shall be prepared, signed and sealed by an Architect and/or a Professional Engineer accompanied by a signed and dated Letter of Undertaking by the Project Initiator, Owner or Tenant, as well as a sealed and signed General Review Commitment Certificate (GRCC) from the Architect and/or Professional Engineer(s) providing the design and field review services.

2 Site plans referencing a current survey, certified by a registered Ontario Land Surveyor, shall show the dimensioned property lines including bearings and spot elevations, lease lines, fence lines, Primary Security Line, Airport zoning setbacks, the boundaries of the Construction, new and existing, above and below grade services, new and existing.

3 The Building Code Report as described in Part 2 of this Code shall contain the building code analysis, exiting diagrams, and any other information as may be required; and shall be prepared by an Architect and/or a Professional Engineer who has proven experience in building code analysis and interpretation.

4 Outline specifications for the building envelope and spatial energy conservation performance including: thermal transfer and transmission ratings; air infiltration, and active/passive energy generation methods; shall be prepared by an Architect and/or a Professional Engineer.

5 Architectural drawings shall fully describe the Building elements of the proposed Construction, following the guidelines of the Canadian Handbook of Practice and include:

a. Key plan with north indication showing the proposed location of Work relative to the Buildings or base Building.

b. Floor plans showing lease lines, Primary Security Line, room names, door numbers, fixtures, floor materials, wall assemblies, the location of major components of fire protection and exits with indication of fire resistance ratings by testing laboratory listings, built-in cabinetwork and detail cross references;

c. Reflected ceiling plans showing lease line, ceiling finishes and heights, bulkheads, fire rating, lighting layout, fire detectors, mechanical grilles, diffusers, sprinkler heads, access panels;

d. Elevation drawings, both exterior and/or interior as required, showing finishes, features and fixtures; and

e. Detail and section drawings showing Construction as required.
6 Structural drawings shall describe all components and systems for supporting the proposed Construction, the location, size and material properties and specifications of all structural members, and the design loads used for the design.

7 Mechanical drawings shall fully describe all HVAC, plumbing, drainage, and fire suppression systems for the proposed Construction, the location, size, capacity of all equipment and components, the location and specification of all fire protection items, connections to Airport systems, a summary of the energy conservation design approach, design loads used for heat loss/heat gain, and mechanical material and equipment specifications.

8 Electrical drawings shall include single-line diagrams and shall fully describe all lighting and power layouts, the location of electrical equipment, reflected ceiling plans, exit and emergency lighting, fire alarm and detection systems, connections to Airport systems, a summary of the energy conservation design approach, electrical load summary, electrical panel schedule, and electrical material and equipment specifications.

3.3.2.3 Submission Guideline—Class B (Addition to Existing Building)

1 The same documents requirements of Class A Construction shall apply and include the extent of new and existing Construction, the demolition and removal of existing Construction, and the additions and modifications to existing Building systems shall be clearly identified.

3.3.2.4 Submission Guidelines—Class C (Alterations to Existing Building)

1 The same documents requirements of Class A Construction shall apply and include the extent of new and existing Construction, the demolition and removal of existing Construction, and the additions and modifications to existing Building systems shall be clearly identified.

2 All aspects of the Construction alterations shall be fully illustrated and specified clearly for Construction purposes within the Construction Documents submitted but may not necessarily comprise all the Class A Construction requirements.

3.3.2.5 Submission Guidelines—Class D (Improvements in Terminals)

1 The same documents requirements of Class A Construction shall apply and include the extent of new and existing Construction, the demolition and removal of existing Construction, and the additions and modifications to existing Building systems shall be clearly identified.

2 All aspects of leasehold improvement Construction shall be fully illustrated and specified clearly for Construction purposes within the Construction Documents submitted and shall at least include a location key plan, a floor plan, reflected ceiling plans and elevations when applicable, to show proposed alterations for architectural, mechanical and electrical elements, as well as proposed effect on occupant loads, exiting requirements and the consideration of energy conservation methods in the design.
3 Where connections for new electrical power, communication, plumbing and HVAC requirements are beyond lease lines, show the connection points and the complete service routing on plan drawings.

3.3.2.6 Submission Guidelines—Class E (Additions to Building Systems)

1 Floor plan drawings shall illustrate and specify the extent of new Construction relative to existing Construction in terms of new electrical power and lighting, plumbing, HVAC, data and communications, fire detection and suppression, baggage handling, hydraulic, fuelling and signage systems.

2 All schematic line diagrams and detail drawings shall show the location, size, capacity of all equipment and components, the location and specification of all fire protection items, the design loads applied, energy conservation methods, and material and equipment specifications to fully describe the Construction.

3 Depending on the scope of the Construction, the requirement to have drawings prepared, stamped and signed by a Professional Engineer and/or an Architect, including a Letter of Undertaking from the Project Initiator and a GRCC from the Professional Engineer may be waived at the discretion of the CCPO in accordance with Part 2 of this Code.

3.3.2.7 Submission Guidelines—Class F (Groundside Civil)

1 Site plans shall reference a current survey certified by a registered Ontario Land Surveyor and shall fully illustrate and specify the scope of the Construction, show all locations of new and existing above ground and underground services complete with invert elevations and above ground services, existing roadways and placements relative to the Construction complete with dimensions and notes.

2 Design drawings including plans, profiles, cross-sections, detail drawings, schematic diagrams, legends, notes and other information shall fully describe the Civil Work.

3 A Project manual including general requirements, Construction procedures, material and equipment specifications, standard drawings, geotechnical information, SUE Report, and all other supporting information and/or reports required to fully describe the Civil Work shall be included.

4 Traffic control and protection plans are required to ensure protection of the public and workers, ensure that vehicular and pedestrian traffic flow is properly maintained during the performance of the Work, and mitigate any negative impacts to Groundside operations including maintaining fire routes. In addition, a review should be undertaken to determine and properly mitigate any potential disruption to Airside operations (e.g. crane permits, access to Airside, etc.).

5 Where Buildings or Structures are included in the Construction, the requirements identified under Classes A, B, C, D and E, as applicable, shall also apply.

6 Construction Documents prepared, signed and sealed by a Professional Engineer including a Letter of Undertaking by the Project Initiator and a GRCC from the Professional Engineer may be waived at the discretion of the CCPO in accordance with Part 2 of this Code, where the scope of the Construction would not require the above.
3.3.2.8 Submission Guidelines—Class G (Airside Civil)

1. The same documents requirements of Class F Construction shall apply, in addition to providing sufficiently detailed information, summarized in a Project work plan, identifying the measures to be taken during Construction activities to minimize disruption to Airport operations, including Airport zoning restrictions, airfield closures, equipment and material storage areas, haul routes, access and security measures, and scheduling and communication of the Work with the GTAA.

3.3.3 Applying for a Facility Alteration Permit (FAP)

1. Applying to the CCPO for a FAP is based on receiving the following documentation from the Applicant:
   a. an Application for Airport Construction properly completed with all applicable information requested on the application;
   b. for GTAA Projects – a copy of the GTAA Project Manager’s confirmation of the final Stakeholders’ sign-off and comments detailing their specific requirements to be included in the design and executed by the Project;
   c. for Tenant Projects – a copy of the Tenant Coordinator’s confirmation of the final Stakeholders’ sign-off and comments detailing their specific requirements to be included in the design and executed by the Project;
   d. all supporting and relevant documents as outlined in Subsection 3.3.2 for the type of Project requested in Clause (a) to be constructed; and
   e. where a Consultant(s) is engaged in the design of the Project and review of Construction, a completed Letter of Undertaking by the Project Initiator and the GRCC’s, in accordance with Sentence 3.3.2.5(3).

2. The information provided in Sentence (1) will be assessed by the CCPO for completeness of the application submission, from which an Application Review Notice (ARN) will be sent to the Applicant with details of the FAP review process and request for additional information as may be required.

3. The FAP application review process consists of a detailed review by GTAA’s Independent Code Compliance Consultant (ICCC) for building code compliance and/or GTAA’s Independent Construction Safety Consultant (ICSC) for Contractors’ health & safety compliance. The Applicant and any party acting in their interest remains responsible for fulfilling all Code and any other specified requirements of the GTAA and other external agencies to the GTAA.

4. GTAA’s ICCC will review the contents of the documents submitted and verify that the scope of the Construction to be authorized by a FAP is in compliance with the applicable fire protection and life safety requirements of the National Building Code and the National Fire Code. The Applicant will be contacted directly by the ICCC with review comments and observations. Note: That a FAP cannot be issued until all outstanding Code comments are addressed satisfactorily with ICCC and CCPO receives their Letter of Recommendation to issue the FAP.
5 GTAA’s ICSC will review the Project in accordance with Part 7 of this Code. The Contractor shall contact the ICSC to discuss Project specific details and requirements related to workplace health and safety and submit the requisite documentation requested. Note: that the FAP cannot be issued until the requirements to start Construction are satisfactory to the ICSC and their confirmation of review is submitted to CCPO.

6 The instructions stated on the Application Review Notice shall be completed fully by the Applicant as part of the advance preparation for obtaining the FAP from the CCPO, subsequent to the Applicant fulfilling Subsection 3.3.4.

3.3.4 Obtaining a Facility Alteration Permit (FAP)

1 Issuing of a FAP by the CCPO is based on receiving documentation subsequent of Subsection 3.3.3 from the Applicant as follows:
   a. as applicable, a copy of the recommendation letter from ICCC, that indicates all building code items have been addressed satisfactorily by the Applicant;
   b. a copy of an email acknowledgement from the ICSC that all safety requirements have been fulfilled by the Contractor and evidence that the documentation submitted is satisfactory;
   c. the Project data and the additional information requested in the Application Review Notice, include the Contractor’s emergency contact information (site superintendent/cell phone number) required for preparing the FAP placard; a copy of the initial three-week advance schedule of Construction activity by the Contractor, etc.; and
   d. a copy of the Contractor’s certificate of insurance coverage as required by Section 2.7 of this Code, where the Project is initiated by a Tenant.

2 Once the provisions of Sentence (1) are completed by the Applicant, the CCPO will then prepare the Facility Alteration Permit (FAP) in the form of an “orange placard” and issue notice via email to the Applicant that it will be provided directly to the Contractor assigned to the Project.

3 Subsequent to the issuance of the FAP, the Contractor must:
   a. contact the Independent Utility Locates Contractor (IULC) where the scope of the Project involves soil disturbance to arrange for existing utilities to be located and marked on site.
   b. contact the applicable Airport Construction Coordinator(s) to obtain the Activity Notice approval(s) as may be required.
   c. contact GTAA Fire Prevention to discuss general fire safety requirements for the Place of Work throughout the Construction.

3.3.5 Terms and Conditions of the Facility Alteration Permit

1 No Person shall Construct or cause to be constructed a Building or any other Structure or system on Airport Lands except in accordance with the supporting
documents, *Construction Documents* and/or any other information on the basis for which a *Facility Alteration Permit (FAP)* is issued.

2 The *FAP* authorizes the *Work* to be carried out in accordance with the drawings and/or specifications as reviewed by the *GTAA* and which accompanied the application for the *FAP*, and the requirements stipulated therein. Submitting the application for the *FAP* with the supporting documents constitutes agreement by the *Applicant* to comply with, and be bound by, all written conditions of the *FAP* authorization, the requirements of the *Code*, requirements of the *CCPO*, and all other terms stated in any lease, license or agreement between the *Applicant* and the *GTAA*.

3 Issuing of a *Facility Alteration Permit* by the *CCPO* signifies that the *Project* has been accepted by the *GTAA* and that the specified *Construction* may proceed, subject to the conditions represented by the *FAP*, the attachments thereto and the requirements of this *Code*. Issuing this *FAP* shall not be considered as an evaluation of the adequacy, quality or completeness of the *Project* design and the *GTAA* assumes no responsibility for such matters. *Construction* may begin only after a *FAP* “orange placard” with a validation number has been issued by the *CCPO* and the *Contractor* shall adhere to all conditions of the issued *FAP*.

4 All *Construction* shall be performed in accordance with the construction safety requirements of the *Occupational Health and Safety Act R.S.O 1990, C. 0.1* and O. Reg. 213/91 Regulations for Construction Projects, by exception of the *Contractor*, the Canada Labour Code - Part II Occupational Health and Safety, and the *Construction* safety monitoring requirements under Part 7 of this *Code*.

5 All *Construction* shall be performed in accordance with the applicable requirements of this *Code* as determined by the scope of the *Project*, except where in such application a satisfactory justification for a compliance alternative has been prepared that demonstrates by describing, explaining and documenting technical equivalency and/or compliance alternative(s) to the requirements of this *Code* and has been accepted by the *CCPO* and/or the *ICCC*.

6 Persons completing the *Work* shall comply with all rules, regulations and requirements issued by the *GTAA* relating to security, safety, health, preservation of property, environment, energy conservation, the maintenance of good and orderly appearance of the *Airport*, and the continuous and efficient operation of the *Airport*.

7 Only approved materials (as per specifications) and specified quality of *Work* shall be used in the performance of the *Work*, and such *Work* shall be performed in accordance with the *Contract Documents* approved for such *Construction* and to the satisfaction of any *GTAA Inspector* reviewing the *Work*. Any part of the *Work* which does not comply with this *Code* or which is not accepted by the *GTAA* with reason shall be removed and replaced at no expense to the *GTAA*.

8 The *GTAA* reserves the right to order, by its own means, an immediate halt to any *Construction* being carried out under a *Facility Alteration Permit* for any circumstance that dictates that it would not be in the best interest of the *GTAA* to permit the *Construction* to proceed. Under such circumstances the *GTAA* shall not
be responsible for paying any costs associated with the halting of the Construction or cancellation of the Facility Alteration Permit as warranted.

9 The Contractor shall pay all costs for damages and unsafe conditions duly created outside the limits of the Place of Work during the course of Construction that the GTAA is forced to rectify due to the Contractor’s performance inability or unwilling conduct.

10 Any Construction schedule shall be flexible in considering interruptions by normal Airport operations required to continue or to be performed that take precedence over any Construction in certain Airport Areas.

11 Copies of all conditions and requirements of the Facility Alteration Permit and all amendments to it shall be made available in advance to all Persons completing the Work. Issuing future Facility Alteration Permits may be denied if the conditions identified in this Article are not adhered to and/or performed by such Person to the satisfaction of the GTAA.

12 All permits, passes, or licenses from GTAA departments and external agencies that are required by the Applicant or Contractors before use or occupancy of the Work is permitted shall be obtained when necessary.

13 As-Built Documents and Record Documents of all finished Construction shall be submitted to the GTAA within the agreed upon timeframe following the completion, use or occupancy of the Work in accordance with the requirements of Part 9 of this Code.

3.3.6 Changes to the Work

1 All relevant documentation for changes to the Work shall be submitted to the CCPO, prior to commencing any Work of such change affecting:
   a. Airport operations,
   b. the Primary Security Line (PSL), or other aspects of public safety and/or security at the Airport,
   c. the structural components of a Building or Structure,
   d. the life safety aspects or components of a Building or Structure,
   e. any major system (fire alarm, sprinklers, plumbing and drainage, HVAC, electrical, communications, security, etc.) of a Building or Structure,
   f. hard and soft retail zones and/or lease lines,
   g. any Civil Work, or
   h. any Work within the Airside area.

3.3.7 Revocation of Permit

1 The CCPO may revoke a FAP with notice provided to the Applicant on the basis that:
   a. the FAP was issued based on mistaken or false information,
b. the Work being undertaken or any part thereof, is not being performed in accordance with the terms and conditions of the FAP as set out in Subsection 3.3.5,

c. the Work being undertaken, or any part thereof, is not of the same type or scope of Work as that contained in the Construction Documents submitted for the FAP,

d. the Work has not, in the opinion of the CCPO, commenced within 30 days of the scheduled Construction commencement date, or the issuing date of the FAP, or

e. the Work is, in the opinion of the CCPO substantially suspended or discontinued for a period of more than three months and without satisfactory explanation given by the Contractor completing the Work.
4.1 Applicable Codes and Standards

4.1.1 Application

1. The Construction Compliance & Permits Office (CCPO) is the Authority Having Jurisdiction (AHJ) at the Airport for all matters of Construction pursuant to the processes, procedures and compliance requirements as they relate to the design requirements and Applicable Codes and Standards of this Subsection.

2. Any external agency that is recognized by the GTAA as having specific jurisdiction over parts of any Construction shall be responsible for overseeing compliance of such Construction with its own regulations.

3. The responsibility in Sentence (2) shall be coordinated with the CCPO as it relates to notice of compliance, authorization, inspection and acceptance matters, and any communication with and by the Applicant and holder of a Facility Alteration Permit (FAP) respective to the Construction.

4. The Airport is subject to several jurisdictions having authority applying relevant regulations, statutes, codes, laws and standards to specific occupancies, use and to the methodology and practices of Construction. All such authorities are recognized and supported by the GTAA for the mandatory application and adherence of their requirements as part of any Airport Construction.

5. The National Building Code, National Fire Code and the National Energy Code are the primary governing regulations, including all statutes, codes, and standards referenced therein, for the design and Construction of Buildings at the Airport.

6. The TP312E Aerodrome Standards and Recommended Practices is the primary governing standard for the design and Construction requirements of the Airside area of the Airport.

7. Federal labour regulations apply to all areas, Buildings and spaces occupied by federal employees and/or GTAA representatives and where a Contractor with a federal designation performs Construction.
8 Provincial labour regulations only apply in any Construction area under the control of a provincially regulated Contractor under contract to the GTAA or to a Tenant of the GTAA.

9 Where identified in this Code, certain provincial regulations and statutes or parts thereof have been elected and adopted by the GTAA where they are more stringent than, or absent within related federal regulations and statutes, for governing specific aspects of Construction at the Airport.

10 Respective regulations and standards of municipal authorities and utility providers shall apply where roadwork and utilities in their jurisdiction are part of the Construction. All Airport roadwork shall follow applicable municipal and provincial codes, standards and practices.

11 Security regulations and measures set out by the GTAA apply for all Construction Work occurring at the Airport.

4.1.2 Limitations

1 The provisions of referenced documents in this Code apply only to the extent that they relate to Buildings and other types of Structures permitted on Airport Lands.

2 The GTAA reserves the right to adopt and specify the requirements of the most recent edition of any applicable codes and/or standards, in part or as a whole, which demonstrate more stringent requirements than those within the current regulations, or for which requirements are absent from or not specifically expressed in the current regulations.

3 The documents referenced in this Code shall include all amendments, revisions and supplements effective on the date pursuant to Sentence 4.1.2(4) below, unless otherwise specified.

4 The effective date for applying any of the Applicable Codes and Standards is the sign-off date by the Project Initiator at the end of the Preliminary Design Review stage of the Project. Any subsequent stage, phase, addition and/or alteration associated with previously completed Construction shall be subject to an assessment of applicability by the GTAA and/or any external governing authority enforceable by law.

5 Where the GTAA applies a more recent or stringent regulation before the effective date of application referred to in Subsection 4.1.1(8) above, such change shall be given notice to and implemented by the Project Initiator at no additional cost to the GTAA where it is a Project initiated solely by a Tenant.

4.1.3 Conflicting Requirements

1 In the case of conflict between the provisions of this Code and those of a referenced document, the provisions of this Code shall govern unless enforceable by law.
4.1.4 List of Publications

4.1.4.1 Application

1. The latest edition and all amendments thereto of any of the following regulations, statutes, codes and standards in this Code shall apply only to the design and Construction of Projects at the Airport.

2. The following list is not exhaustive, and any other regulations, statutes, codes and standards that are relevant to the design and Construction of Buildings, Structures, or Civil Work not listed here, are also deemed applicable.

4.1.4.2 Federal Agencies and Governing Regulations

Canada Green Building Council

Leadership in Energy and Environmental Design (LEED®) Green Building Rating System for New Construction and Major Renovation (LEED® Canada-NC Version 1.0)

Canadian National Institute for the Blind

Clearing Our Path—Accessibility Recommendations for the Built Environment

Canadian Standards Association

Canadian Electrical Code

CAN/CSA-B72-M87—Installation Code for Lightning Protection Systems
CAN/CSA-B651-12—Accessible Design for the Built Environment
CAN/CSA-B651.1-09—Accessible Design for Automated Banking Machines
CAN/CSA B836—Storage Handling and Dispensing of Aviation Fuel at Aerodromes (NFPA 407—Standard for Aircraft Fuel Servicing)
CAN/CSA-Z204—Guideline for Managing Indoor Air Quality in Office Buildings
CAN/ULC-S524—Standard for the Installation of Fire Alarm Systems
CAN/ULC-S536—Inspection and Testing of Fire Alarms
CAN/ULC-S537—Verification of Fire Alarm Systems
CSA B149—Natural Gas and Propane Installation Code
CSA S350—Code of Practice for Safety in Demolition of Structures
CSA-S413—Parking Structures
CSA-S478—Guideline on Durability in Buildings
CSA-Z432—Safeguarding of Machinery
CSA-Z460—Control of Hazardous Energy-Lockout and Other Methods
CSA-Z462—Workplace Electrical Safety Standards

Canadian Transportation Agency

Canada Transportation Act
Persons with Disabilities Regulations
Accessible Canada Act
Canada Transportation Act
Accessible Transportation for Persons with Disabilities Regulations

Environment Canada
Impact Assessment Act
Canadian Environmental Protection Act
Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products
Federal Halocarbon Regulations
Fisheries Act
Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments
Hazardous Products Act
Hazardous Products Act Amendment - Workplace Hazardous Materials Information System (WHMIS)
Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum Products on Federal Lands Regulations
Storage of PCB Material Regulations
Transportation of Dangerous Goods Act
Transportation of Dangerous Goods Act – Transportation of Dangerous Goods Regulations

Human Resources and Skills Development Canada
Canada Labour Code - Part II Occupational Health and Safety
Canada Occupational Health and Safety Regulations
Fire Commissioner of Canada Standards

National Research Council – National Code Documents
National Energy Code of Canada for Buildings
National Building Code of Canada
National Fire Code of Canada
National Plumbing Code of Canada

Office of the Commissioner of Official Languages
Official Languages Act—Part IV Communications with and Services to the Public
Official Languages Regulations

Royal Canadian Mounted Police
Transportation Association of Canada
Canada Border Services Agency
Citizenship and Immigration Canada
Federal Identity Program Manual
Manual of Uniform Traffic Control Devices of Canada
Treasury Board of Canada Secretariat

Transport Canada

Aeronautics Act
Aerodrome Security Measures - Restricted Document
Canadian Airport Traffic Regulations
Canadian Air Transport Security Authority Act
Canadian Aviation Regulations—Part III
Canadian Aviation Security Regulations
Going Places—Access Needs of Visually Impaired Travellers in Transportation Terminals: Design Guidelines (TP12940)
Public Safety Act, 2002
Toronto Pearson International Airport Zoning Regulations
TP312—Aerodrome Standards and Recommended Practices
TP1247—Land Use in the Vicinity of Airports
TP11500—Wildlife Control Procedures Manual
TP12233—Airport Water Quality Manual
TP13459—Sharing the Skies—An Aviation Industry Guide to the Management of Wildlife Hazards

United States Department of Homeland Security

4.1.4.3 Provincial Agencies and Governing Regulations

Electrical Safety Authority

Ontario Electrical Safety Code

Ministry of Labour

Occupational Health and Safety Act

Occupational Health and Safety Act—Designated Substance—Asbestos on Construction Projects and in Buildings and Repair Operations

Occupational Health and Safety Act—Regulations for Construction Projects

Occupational Health and Safety Act—Regulations for Industrial Establishments

Workplace Safety and Insurance Act
Ministry of Natural Resources (Metro Toronto Region Conservation Authority)

Conservation Authorities Act

Ministry of Transportation Ontario

Highway Traffic Act
Ontario Provincial Standards for Roads and Public Works
Ontario Traffic Manual
MTO’s Ontario Structure Inspection Manual (OSIM)
MTO’s Structure Rehabilitation Manual
Geometric Design Standards for Ontario Highways, Ministry of Transportation Ontario (MTO)
Roadside Safety Manual, Ministry of Transportation Ontario (MTO)

Ontario Ministry of Environment, Energy and Climate Change

Environmental Protection Act
Fish and Wildlife Conservation Act
General Waste Management Regulations - EPA
Guidelines for Use at Contaminated Sites in Ontario
Industrial, Commercial and Institutional Source Separation Programs
Ozone Depleting Substances – General
Refrigerants
Waste Audits and Waste Reduction Work Plans
Waste Management – PCB’s

Other Ontario Legislation

Lightning Rods Act
Occupiers’ Liability Act
Power Corporation Act

The Accessibility for Ontarians with Disabilities Act (AODA)

Technical Standards and Safety Authority (TSSA)

Guidelines for Excavations in Vicinity of Gas Lines
Liquid Fuels Regulations
Technical Standards and Safety Act

4.1.4.4 Municipal Agencies and Governing Regulations

Bell Canada
City of Mississauga
By-law 1036-81—Fire Routes and Fire Hydrants

City of Toronto
Design Criteria for Sewers and Watermains
By-law 457 (Chapter 681 of the City of Toronto Municipal Code)

Eversource/Hydro Mississauga
Eversource Hydro Mississauga Work Protection Code

Enbridge Gas
Support of Gas Pipelines in the Vicinity of Excavations

Peel Regional Health

Peel Regional Police

Regional Municipality of Peel
Sanitary Sewer Use By-law 90-90
Prevention of Backflow into Municipal Drinking Water System of the Regional Municipality of Peel - By-law 10-2017

4.1.4.5 Other Agencies and Governing Standards

American Petroleum Institute
American Petroleum Institute Standards

American Society of Heating and Air Conditioning Engineers

American Society for Testing and Materials, (ASTM)

American Association of State Highway and Traffic Officials (AASHTO)

Federal Aviation Association
Apron and Terminal Building Planning Manual

Greater Toronto Airports Authority
Airport Emergency Plan
Airport Traffic Directives
Airside Activity Program Version 2.0
Asbestos Management and Control Program
Communications Cabling Specifications and Procedures
Electronically Monitored Door Assemblies—Design and Construction Requirements
Emergency Services Fire Safety Plan
Engineering Design Requirements—Exterior Building Materials Guideline
Engineering Design Requirements—High Performance Building Policy (LEED)
Environmental Emergency Contingency Program
Facilities Guide for Contractors to Provide Data for All Assets Requiring Maintenance
Facilities Shutdown Procedures Manual
Facilities Utilities Locates Request Procedures
*GTAA CADD Standard Guide* (supersedes United States National CAD Standard® if conflicts are present)
GTAA Construction Hoarding and Barriers Guidelines
*GTAA Contractor Safety Pre-Qualification Guidelines*
*GTAA Engineering Design Standards*
GTAA IT Cabling Specification Standard
GTAA IT Telecommunication Room Standard
GTAA IT Technology Standard
*GTAA Surface Penetrations Guidelines*
Green Building Policy
Greenhouse Gases Policy
Hot Work Fire Safety Sign-off Checklist
Identification and Labelling Standards Manual
Information Technology and Telecommunications Electronic Safety and Security Specifications
Logistics Program
Metering Policy
Materials Movement Permit
Roof Assess Permit
Routine Procedures to Enter/Exit Asbestos Contaminated Work Areas
Sediment and Erosion Control Plan
Signage Standards and Guidelines Manual
Tenant Design Standards
Testing Commissioning Acceptance and Turnover Manual
Toronto Pearson Handbook for Business Partners
*United States National CAD Standard®*
Wildlife Management Plan
Design Requirements

Insurance Bureau of Canada
Fire Underwriters Survey—Water Supply for Public Fire Protection – A Guide to Recommended Practice

International Civil Aviation Organization
Aerodrome Design Manual (Doc. 9157)
Annex 14, Volume 1—Aerodrome Design and Operations

National Fire Prevention Association
NFPA 10—Standard for Portable Fire Extinguishers
NFPA 13—Installation of Sprinkler Systems
NFPA 17—Wet Chemical Extinguishing Systems
NFPA 20—Standard for the Installation of Stationary Pumps for Fire Protection
NFPA 24—Installation of Private Fire Service Mains and their Appurtenances
NFPA 30—Flammable and Combustible Liquids
NFPA 33—Spray Application Using Flammable and Combustible Liquids
NFPA 70—National Electric Code
NFPA 407—Standard for Aircraft Fuel Servicing
NFPA 409—Standard on Aircraft Hangars
NFPA 415—Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways
NFPA 419—Master Planning Airport Water Supply Systems for Fire Protection
NFPA 502—Limited Access Highways, Tunnels, Bridges, Elevated Roadways, and Air Right Structures
NFPA 780—Standard for the Installation of Lightning Protection Systems

Nav Canada
NC-210—Design for Control Tower

4.2 Airport Technical Information

4.2.1 Responsibilities

1 It is a mandatory requirement when initiating a Project that general technical information is obtained from the GTAA Engineering data department for planning and design purposes. Access may be provided to records currently on file and any subsequent updating of information necessary for the needs of the Project shall be the responsibility of the Person preparing the Construction Documents.
2 The GTAA takes no responsibility for, nor warrants in any way, the adequacy, completeness or accuracy of information, record drawings, and other documents or records provided for the purposes of design or Construction.

3 The accuracy of such information, records and drawings is the responsibility of the person preparing the Construction Documents to verify during the design phase, and that of the Contractor during Construction.

4 All survey information prepared for Construction shall use monuments, benchmarks or control points that are recognized by the GTAA as references to the Airport datum and geodetic system. Before any field surveys are undertaken, contact the GTAA Engineering data department to obtain the proper Airport information to base the survey upon.

5 It is the responsibility of the Person preparing Construction Documents to follow the mandatory format requirements set out in the GTAA CADD Standards Guide in accordance with Part 9 of this Code.

6 It is a mandatory requirement that all compiled information for the purposes of Construction shall be recorded to show as-built conditions and submitted to the Construction Compliance and Permits Office (CCPO) and the GTAA Project Manager when completed for updating the Airport technical data base files, in accordance with Part 9 of this Code.

7 It is mandatory for all GTAA Projects that the design drawing naming and numbering follow the GTAA naming convention. The Designer is required to make a request in writing to the GTAA Engineering data department to obtain drawing numbers.

4.2.2 Land Parcels

1 Soils and survey data, road and utility layouts, to the extent that they are shown on current Airport property plans, are available through the GTAA Engineering data department as reference for planning purposes by the Person preparing the Construction Documents. The Person preparing the Construction Documents shall verify this information and be responsible for preparing all necessary legal and conditions surveys to gather and record all necessary and pertinent information to base the proposed design upon and for Construction. These surveys shall include areas adjacent to those proposed for Construction where necessary for describing the proposed design.

4.2.3 Building Spaces

1 Within existing Buildings, spatial parameters and utility service data shall be provided from respective compiled documents on file as may be available through the GTAA Engineering data department. The Person preparing the Construction Documents shall be required to conduct and be responsible for conducting necessary conditions surveys to gather pertinent information to base the proposed design upon for the purpose of Construction. These surveys shall include where necessary for describing the proposed design, areas adjacent to those proposed for Construction.
2 Any design that involves the creation of new or modification of existing Building Spaces and/or the addition or removal of doors must contact the GTAA Engineering data department to obtain new room and/or door numbers.

4.2.4 Existing Information

4.2.4.1 GTAA CADD Standards Guide

1 The GTAA Engineering data department provides the GTAA CADD Standard Guide for reference in organizing digital site data and settings files.

4.2.4.2 Information Available from GTAA Engineering Data

1 Major Building Projects - digital site and Building data and settings files, if available for the specific area.
2 Minor Building Projects - digital site and Building data and settings files, if available for the specific area.
3 Major Civil Projects - digital site and Building and settings files, if available for the specific area.
4 Minor Civil Projects - scaled drawings for the area the Construction encompasses, digital site data and settings files, if available.

4.3 The Airport

(Reserved)

4.4 Design Requirements for Development Areas

4.4.1 Scope

1 All proposed uses of Airport Lands shall be subject to the land use zoning and planning requirements and processes of the GTAA.

4.4.2 Type 1—Land Parcels

4.4.2.1 Planning Requirements

1 Scope: Development of Land Parcels of the Airport shall be governed by the following planning requirements and shall be subject to the GTAA Land Use Committee’s authorization prior to any Project being initiated.

2 Site Plan Development: All leased Land Parcels shall be developed within the guidelines expressed in the site plan development documents submitted by the Tenant to the GTAA for approval. The plan shall be prepared by the Tenant according to professional planning practices and standards, and conform to the Airport Land Use Plan, an Environmental Baseline Study and requirements specified in this Code. The plan shall indicate all existing and proposed Structures and open
space improvements, including applicable portions of adjacent properties, roads and taxiways that provide access to or impose limitations on the Land Parcel.

3 **Open Space Development**: Spaces generated between Structures and other improvements shall be developed with complete landscaping. Such landscaping shall serve as an integrating element between areas of varying uses both within the Land Parcel and those contiguous thereto.

4 **Building Placement**: Location and orientation within the Land Parcel of all proposed major Buildings or Structures shall be governed by consideration of intended functions, vehicular and pedestrian access, parking requirements, Building size and massing, open space allowances, and aeronautical zoning limitations. Design of Structures shall consider massing elements, aesthetics, materials, and climatic exposures. Placement of minor Structures shall be integrated into the overall site planning and its attendant open spaces.

4.4.2.2 **Zoning Requirements**

1 **Scope**: All Structures on leased Land Parcels shall be installed according to the following general requirements or, where more restrictive, to governing regulations as determined by the GTAA and/or Nav Canada.

2 **Setbacks**: Structures shall be set back 6.0 m from Airport property lines, 3.0 m from demising lease lines and 7.5 m from lease lines bordering taxiways. Major and minor axis of Buildings shall be parallel to the road fronting the lease line unless approved otherwise. The above setbacks are considered minimum and shall be subject to review and possible amendment by the GTAA for all site plan proposals. Consideration shall also be given to setback requirements for the Airport Primary Security Line where it becomes applicable.

3 **Height Restrictions**: Overall Building heights, including roof mounted equipment, enclosures or any other Structure:

   a. shall not exceed the Obstruction Limitation Surfaces of the Toronto Pearson International Airport Zoning Regulations and other standards of Nav Canada and the GTAA,

   b. shall be reviewed on a case-by-case basis where they may occur.

4 **Fire Routes**: All Land Parcels shall make provisions for adequate fire routes for emergency response vehicles in accordance with the National Building Code and the requirements of Fire and Emergency Services (F&ES).

5 In addition to Sentence (4) the following fire route sign requirements shall be provided to be:

   a. in accordance with the design standard of F&ES.

   b. two-sided and permanently mounted on a rigid sign post, pole, or structure.

   c. erected at a height of between 1.9 m and 2.5 m, as measured from the edge of the travelled portion of the designated route, to the bottom edge of the sign.

   d. installed at a distance of between 0.3 m and 3 m from the travel edge of the designated route.
c. installed along the route at approximately 30 m intervals or as frequently as is necessary to identify the route in the judgement of the Fire Chief or his/her designate.

f. installed at 90-degree angle in relation to the edge of the travelled portion of the designated route in such a manner as to allow both sign faces to be visible to traffic from either direction.

6 **Boundary Fences**: All Land Parcels and other Airport Areas specifically assigned a use shall be adequately fenced to prevent access by any unauthorized Person(s) where there is an apparent danger or allurement that requires a physical separation to prevent injury and any other requirements, as regulated by the Occupiers’ Liability Act.

4.4.2.3 **Building Requirements**

1 **Design Guidelines**: All Buildings proposed for the Airport shall be assessed on appearance, form and materials conforming to any master plan and guideline of the GTAA, and as approved by the applicable GTAA Stakeholders.

2 **Foundations**: Design of Structures for foundations shall be performed by a Professional Engineer and based on recent soil testing reports, subsurface utility engineering (SUE) survey, borehole records and an Environmental Review for contaminated soils submitted to the GTAA Environmental Services.

3 **Building Types**: Construction shall be limited to occupancy classifications as defined in the National Building Code and shall include only Group A2, B1, C, D, E, F2 and F3 as defined therein, all of which shall support an Airport-related use acceptable to the GTAA.

4 **Utilities**: Power, water, sewage, storm drainage, natural gas, liquid fuel and communication systems shall be installed and connected in accordance with the Applicable Codes and Standards for the specific utility and where specified in this Code. The design of each system shall be based upon actual recent readings to determine supply capacities for each utility to be connected and on subsurface utility engineering (SUE) survey to confirm actual locations & depths.

5 **On-Grade Placements**: All exterior grade surface treatment for vehicular traffic shall be hard surface pavement (concrete, asphalt, unit pavers, etc.). Walking surfaces shall be textured for slip resistance, sloped for drainage and protected from sharp grade changes. Roads and parking surfaces shall be adequately sloped for drainage to area catch basins and ditches in accordance with Part 5 of this Code. Curbs shall be provided and be constructed of cast-in-place concrete, as a minimum, and where necessary. Road and parking dimension standards shall be equivalent to those adopted by the City of Mississauga.

6 **Landscaping**: All areas of Land Parcels allocated for open space development shall be landscaped and maintained regularly by GTAA or the Tenant as established in their lease or licence agreement. Planting shall be installed and maintained according to GTAA specifications and the requirements specified by the GTAA Environmental Services.
a. Unpaved areas and slopes shall be erosion protected with suitable ground cover, with the minimum provision being maintained grass.

b. Landscape planting shall be provided in areas that border a public roadway commensurate with Airport standards, the proposed land use and the physical environment to support plant life.

7 Fences: The use of chain-link fencing in the immediate vicinity of Buildings shall be permitted only in cases of obvious safety and security requirements, and where location and conditions preclude reasonable alternatives. Wire-disguising devices and screen materials shall not be attached to chain-link fencing unless necessary by specific limiting conditions and shall be installed only with the prior approval of the GTAA.

8 Signage: Location of proprietary signs for Tenant identification shall be mounted on Building exterior walls only and shall be designed in a manner that can be regularly maintained. Freestanding directional signs shall be permitted within the lease lines and subject to review by the GTAA for: signage size, proportion, materials, colours, fabrication, and illumination characteristics shall be subject to the requirements of the GTAA Signage Standards and Guidelines Manual and GTAA approval on an individual basis. Elaborate multi-coloured, moving or flashing signs with exposed lamps are prohibited.

9 Illumination: Exterior lighting and illuminated signage installations shall be approved by the GTAA on an individual basis for visual and electronic compatibility with Airport aviation regulations and standards.

10 Retail: When a GTAA Project affects change within a Terminal, and affects an existing retail unit, or creates a new retail unit, it is the responsibility of the Project Architect to provide drawings to match the format of those in the Tenant Design Standards, section 7. These drawings must include the Floor Plan of the Hard Retail Zone, Soft Retail Zone (if applicable), the elevation and section of the base building portal.

4.4.2.4 Provisions by the GTAA

1 Services and systems serving Land Parcels that are in place or that shall be provided to the Tenant are defined and stipulated in the terms and conditions offered by the GTAA Marketing and Commercial Development Department. This information is defined in the Tenant lease or license agreement and therefore is not prescribed in this Code.

4.4.3 Type 2—Building Spaces

4.4.3.1 Building Space Requirements

1 Scope: Construction of a Building Space shall be reviewed and authorized by the GTAA Space Allocation Committee prior to design being initiated and is also governed by the following requirements.

2 Building Envelope: No Construction of a Building Space shall be permitted that modifies the exterior of a Building envelope maintained by the GTAA except as
permitted by the *GTAA Design Review Committee* and under conditions specifically described in Sentence (3) below.

3 **Exterior Alterations**: Such *Construction* and appurtenances of Sentence (2) that are external to the *Building* shall be limited to alterations directly related to passenger, baggage, and cargo handling functions, and to provisions for handling and servicing aircraft as follows:

a. **Equipment Connections**: Apron equipment such as aircraft loading bridges shall be approved on an individual basis.

b. **Utility Connections**: Electrical, plumbing, and mechanical equipment routing shall only interface with the *Building* envelope between the walls enclosing the *Building Space*, and where said space is restricted from public access.

c. **Miscellaneous Attachments**: Vertical or horizontal pipe and duct runs along any exterior surfaces shall not be permitted except with the approval of *GTAA Engineering*. Aircraft gate signs, guidance equipment, antennas, clocks, CCTV monitors, changeable message signage and special lighting shall be permitted on an individual case approval basis.

4 **In-Apron Fuelling**: Excavation, backfilling and paving related to the installation and alteration of pipelines and pits shall conform to *GTAA* specifications and in accordance with the requirements of the Pearson International Fuelling Facility Consortium (PIFFC).

5 **Interior Alterations**: All interior areas are classified either as *GTAA-maintained Airport Space* or leased *Building Space*.

a. **Airport Space**: No *Construction* of either temporary or permanent nature shall be permitted within the *Airport Space* when performed by a *Tenant* except for limited connection to and extension of utilities, communications and baggage spaces. All such *Construction* must conform to the standards related to the *Building* and must be authorized by a *Facility Alteration Permit (FAP)*. Included in the *Airport Space* are *Public Spaces* and *Service Spaces*.

b. **Building Space**: *Construction* by a *Tenant* of either temporary or permanent nature shall be permitted within the *Airport Space* and be afforded provisions by the *GTAA* as may be stipulated in the terms and conditions of the *Tenant’s lease agreement* with the *GTAA*, and subject to all terms and conditions of a *FAP*.

4.4.3.2 **Provisions by the GTAA**

1 Services and systems serving *Building Spaces* that are existing or that shall be provided by the *GTAA* to the *Tenant* are defined and stipulated in the terms and conditions of the *Tenant lease agreement*. 

4.4.4 **Type 3—All Other Airport Areas**

1. Structures and systems serving other Airport Areas that are existing or that shall be provided by the GTAA to the Tenant are defined and stipulated in the terms and conditions of the Tenant lease agreement.

4.4.5 **Type 4 —All Other Non-Airport Surrounding Areas**

1. Any developments including, but not limited, to Buildings, Structures, towers or antennae that are affected by Obstacle Limitation Surfaces, ICAO Type A Surfaces, or the Airport Operating Area (AOA) must be reviewed by the GTAA for compliance with height restrictions and applicable noise guidelines. As well, any developments that meet NAV Canada criteria for land use reviews will be assessed concurrently and forwarded by the GTAA to NAV Canada for their review and comment.

2. Submissions to the CCPO for these reviews should include:
   a. Site Plan in CAD format (preferred) or PDF drawing showing the Building or Structure footprint and orientation and the coordinates of the outside corners of the proposed Building or Structure. If coordinates are not available, Building or Structure dimensions must be provided to nearby permanent roads or adjacent structure to enable an approximate location and orientation within the site.
   b. Finished floor elevation or ground elevation (Above Sea Level).
   c. Total height of all the Structures including any rooftop HVAC units, ladders, railings or architectural features.
   d. For Projects on Airport Lands or in the immediate vicinity of the Airport, details will be required with respect to: exterior walls and roofing materials being used; technical specifications of solar roof panels; exterior lighting/illumination systems; antennas; radio transmitters; cell towers; etc., to determine compliance with restrictions associated with NavCanada’s aeronautical facilities and telecommunication systems and flight procedures.

4.5 **Sustainable Design**

4.5.1 **Minimum Requirements**

1. The following are the requirements for the design and Construction of all Buildings pertaining to Section 2.1.1 of this Code except for Buildings listed under Subsection 4.5.2.

2. The energy efficiency design of Buildings is required to meet one of the following two requirements:
   a. Achieve the energy efficiency levels attained by conforming to the ANSI/ASHRAE/IESNA 189.1, “Standard for the Design of High-Performance Green Buildings”; or
b. Exceed by not less than 30% the energy efficiency levels attained by conforming to the ANSI/ASHRAE/IESNA 90.1, “Energy Standard for Buildings Except Low-Rise Residential Buildings”.

Compliance with one of the two above requirements is mandatory and will be reviewed for compliance by GTAA Environmental Services.

4.5.2 Exceptions

1. Any Building Space, which uses energy at a rate less than 12 W/m² under peak conditions.
2. Temporary structures such as Construction trailers, tents, air-supported Structures and portable classrooms.
3. Warehouses and storage rooms where the design indoor temperature does not exceed 10°C.
4. Unheated storage garages and unheated storage rooms except as noted below.

Note: Conditioned spaces of Buildings exposed to unheated storage garages and unheated storage rooms shall meet the Building envelope requirements ANSI/ASHRAE/IESNA Standard 90.1.

4.6 Design Requirements for Buildings

4.6.1 Architectural Design

4.6.1.1 Accessibility

1. Buildings at the Airport shall be designed in such a manner as to allow for accessibility by Persons with disabilities.
2. Design of spaces within Buildings shall conform to the following:
   a. National Building Code
   b. CAN/CSA-B651-12; Accessible Design for the Built Environment
   c. CAN/CSA-B651.1-09; Accessible Design for Automated Banking Machines
   d. CNIB; Clearing Our Path – Accessibility Recommendations for the Built Environment
   e. Where applicable the Accessibility for Ontarians with Disabilities Act (AODA). If more rigid regulations for new Building Construction than CSA B651 standard, than comply with OBC Barrier Section 3.8 Barrier-Free Design.
   f. The Accessible Canada Act
   g. Canada Transportation Act - Accessible Transportation for Persons with Disabilities Regulations
   h. Transport Canada

ii. Making Transportation Accessible—A Canadian Planning Guide

The foregoing is not an exhaustive list and Consultants, Contractors and Tenants are responsible for ensuring that they comply with all applicable laws pursuant to their Contract or lease agreement with the GTAA.

4.6.1.2 Wildlife Control

1 The configuration of elements and components of Buildings and Structures, including all associated landscaping and vegetation shall be designed and arranged in such a manner as to prevent or discourage bird nesting and perching or habitats that might attract wildlife.

2 Consultants shall contact the Manager, Aviation Safety and Emergency Response Programs for the requirements and limitations for design with respect to wildlife at the Airport. For general guidance in design, refer to the following publications:
   a. Canadian Aviation Regulations; Part III, Sub-part 2 – Airport Wildlife Planning and Management,
   b. Toronto Pearson International Airport Zoning Regulations,
   c. TP11500 - Wildlife Control Procedures Manual,
   d. TP13459 – Sharing the Skies – An Aviation Industry Guide to the Management of Wildlife Hazards, and
   e. Ontario Fish and Wildlife Conservation Act.

3 Refer to Section 5.12 of this Code.

4.6.1.3 Health Agency Approval

1 Peel Regional Health is the Authority Having Jurisdiction for issues regarding public health at the Airport and in that capacity, shall be notified of Construction of any of the following:
   a. New food establishments;
   b. Modifications to an existing food establishment;
   c. Offering for sale of any pre-packed food products;
   d. Vending machine operations;
   e. Proposal for the establishment of any water recreation facilities;
   f. Hair salon or barber shop;
   g. Nurseries or child care facilities; and
   h. Any other health-related facility.

2 The proposed Construction shall be clearly shown, noted and specified on drawings submitted for review and approval by Peel Regional Health prior to commencing Construction.
3 To avoid Project delays, Tenants are advised to make required submissions to Peel Regional Health as early as possible to obtain the necessary approval.

4 The Construction Compliance & Permit Office (CCPO) requires a copy of the Letter of Compliance from Peel Regional Health, as proof of review and acceptance of the Construction as part of the Facility Alteration Permit (FAP) requirements, to be submitted prior to requesting the occupancy/use of the Project and authorization being given.

5 Contact Peel Regional Health directly to arrange the above requirements with the representative for the Airport.

4.6.1.4 Security and Inspection Services

1 Terminals and cargo facilities constructed for the purpose of screening passengers, non-passengers, goods and other items at the Airport shall be designed to conform to the requirements provided through the GTAA, supplemental to government inspection service requirements.

2 Design of such spaces shall conform to the identified and provided standards based on impacted or associated government agency. Standard documentation is restricted and shall be requested through the GTAA business relationship member.

4.6.1.5 Demolition and Abandoned Building Systems

1 The Applicant for a Facility Alteration Permit (FAP) for the demolition of a Building or other type of Structure shall refer to Article 2.3.3.3 for the applicable requirements of the National Building Code. Also, a designated substance survey must be submitted prior to the demolition of any Buildings and/or Structures to ensure that if there are hazardous materials present, that they have been removed appropriately in compliance to the Applicable Codes and Standards.

2 The Contractor shall provide all protection such as barriers, hoarding, bracing, supports, shoring and underpinning in accordance with the GTAA Construction Hoarding and Barriers Guidelines to ensure safety to persons, vehicles, adjacent structures and property prior to commencing demolition. The Contractor shall maintain all such protection in good order during the demolition and remove when finished.

3 Where any such protection specified above is required to be engineered, such engineering shall be performed by a Professional Engineer registered in the Province of Ontario. All engineering drawings of such protection shall bear the stamp and signature of the Professional Engineer engaged to design the protection and must be submitted to the CCPO for review prior to commencement of demolition operations.

4 Where demolition includes alterations to or occurs adjacent to the Primary Security Line (PSL) the Contractor shall review and have the demolition approved by GTAA Corporate Safety and Security Department prior to commencing any demolition activities.
5 Repair or replacement of damage to any *Building or Structure* to remain caused by the demolition shall be at the expense of the *Contractor* and to the satisfaction of the *GTAA*.

6 The *Contractor* shall dismantle and remove all *Abandoned Systems* that are redundant due to the demolition.

7 The area of demolition shall remain free of accumulation of demolished materials and rubbish, by an orderly removal of material from the same area, placing it into dumpsters, and then removing the debris from the *Airport* on a regular basis, in accordance with Subsection 7.7.9 of this *Code*.

8 As a general practice, demolition operations shall be completed before preparations for new *Construction* can commence to limit the amount of materials on site at any given time, unless specific circumstances determine otherwise.

9 The *Contractor* shall coordinate the removal requirements for removing any material, fixture and equipment that are identified during the design review as property of the *GTAA* before commencing demolition. The *Contractor* shall take the necessary precautions to prevent damage to such items until turned over to the *GTAA*.

10 The *Contractor* responsible for demolition shall provide a Waste and Material Separation Management Plan that is acceptable to the *GTAA* and compliant with Section 5.5 of this *Code* for all materials to be removed from the *Construction* site.

11 Decommissioning of all utility services to the *Building(s)* shall be the responsibility of the *Contractor* and include coordination of shut downs, lock-outs, capping and termination of services with the respective utility owners and *GTAA Engineering* at least one month in advance of starting to schedule decommissioning of utility services. Refer to Section 7.10 for procedures for interruptions or shut downs of *Airport* systems. In addition, a closeout report from the designated substance survey is required to be submitted to *GTAA Environmental Services* which must include information on the quantity of material removed, location of where material was taken and copies of way bills, manifests etc. that confirm this information.

### 4.6.2 Construction to Match Existing

1 All new materials, fixtures, devices, systems, equipment and components where modifications, infill and extensions of the existing components are required shall match the look, feel and functionality of the existing materials, fixtures, devices, systems, equipment and components.

2 The *Contractor* shall be responsible for making good all materials and finishes of walls, floors and ceilings to match existing walls, floors and ceilings within all adjacent areas damaged and affected by the *Construction* of the *Building Space*.

3 Where new materials are unable to match existing materials, the *Contractor* shall notify *GTAA Engineering* and alternative materials and design solutions shall be determined between the *GTAA* and the *Contractor* prior to the installation.

4 The *Contractor* shall maintain or improve all existing fire ratings, separations and performance where *Construction* affects fire ratings.
5 The Contractor shall seal and make watertight all roof penetrations in a manner acceptable to the GTAA with approved materials.

6 Where the Construction causes an abandonment of existing floor penetrations, a satisfactory infill method to match existing floor penetrations and to maintain existing fire resistance ratings shall be applied. Repair or replacement of finish flooring material shall match existing.

7 All abandoned floor penetrations that are to be repaired by infilling shall first be surveyed by the Contractor prior to covering or concealing and provide dimensional data on the as-built drawings submitted to the GTAA Engineering data department.

8 All abandoned roof penetrations shall be infilled and re-roofed.

9 Provide drawings showing the location of any proposed roof penetration and the roofing details.

10 Where the Construction, or previous Construction causes a ceiling access panel to not be required, it shall be removed.

11 Structural member fireproofing damaged or removed during Construction shall be repaired in an equivalent manner with GTAA approved material.

4.6.3 Fire Safety Equivalents

1 Buildings, their fire compartments and other fire safety components shall be designed to meet the requirements of the National Building Code, National Fire Code, and tested designs published by accredited testing companies or as published by Underwriters Laboratories Canada using fire safety equivalents based upon industry accepted engineering practice.

2 Division C, Section 2.3 of the National Building Code shall be used to achieve the requirements of acceptable compliance alternatives.

3 Submission of the required documentation as part of Sentence (1) shall be made to the Independent Code Consultant (ICCC) well in advance to allow for adequate review and processing.

4.6.4 General Requirements

4.6.4.1 Materials, Appliances, Systems and Equipment

1 All materials, appliances, systems and equipment installed shall meet the requirements of this Code.

4.6.4.2 Recycled or Used Materials, Appliances and Equipment

1 Unless otherwise specified in this Code, recycled materials may be utilized, and used materials, appliances and equipment may be utilized when they meet the requirements of this Code for new materials, appliances and equipment demonstrate their warranty, safety and whole life cost benefit and are satisfactory to the GTAA for the intended use in a Building and other types of Structure.
4.6.4.3 **Bollards and Guards**

1. Perimeter of *Terminals* in *Airside* areas shall be protected against damage from vehicular movement. Bollards and guards shall be designed and installed to standards specified by *GTAA Engineering*.

2. Each side of door openings and placements of mechanical and electrical equipment shall be protected by bollards installed to standards specified by *GTAA Engineering* where vehicle movement is likely to damaging such items.

3. All placements projecting above grade level that are bordering vehicle traffic areas including gas valves, water hydrants, post indicator valves, loading bridge pylons and guard booths shall be adequately protected from impact using methods acceptable to the *GTAA*.

4.6.4.4 **Exterior Cladding**

1. All exterior-cladding systems shall conform to *GTAA* standards. Refer to the *GTAA* Exterior Building Materials Guideline.

2. All steel components exposed to weather, water, and condensation conditions shall be protected from corrosion by hot-dip zinc galvanizing and/or high-performance coating applications.

4.6.4.5 **Glazing Systems**

1. All design and installation shall incorporate thermally broken aluminum frames with rain screen drainage and sealed insulated glass units. Frame finishes shall conform to *GTAA* standards. Refer to *GTAA* Exterior Building Materials Guideline.

2. Where glazing systems are exposed to *Airside Areas* and susceptible to jet blasts of aircraft, both the supporting frame and glass panels shall be designed to withstand these forces without failure. *GTAA Engineering* may review design loads of such systems.

3. Make provision for washing and maintaining of glazing systems and skylights from the exterior face and for high ceiling interior spaces with high-level glass surfaces in accordance with applicable safety and labour regulations.

4. Where glass is to be installed in areas of potential impact and breakage, the specifications shall consider the use of tempered, laminated or applied film methods to prevent the fragmentation of glass and injury to the public.

5. Where windows exposed to aircraft fuel spill fires require an external water spray (deluge) system to protect the glass surfaces in accordance with NFPA 415.

4.6.4.6 **Interior Finishes**

1. Selected materials shall be durable, suitable for the intended use and have a Flame Spread Rating in compliance with the *National Building Code*. The composition of the materials shall be capable of providing adequate resistance to breaking, denting, chipping, scratching, peeling, staining and marking, as well as being easily repaired and cleaned as required due to the above. Materials shall be subject to the *GTAA’s* approval of the above qualifications for all areas within the *Terminals*.
2 Detailing of exposed materials shall have edges, surfaces, corners and fixtures configured in a manner that does not create hazards, such as slipping, impact and snagging for all building occupants.

3 Samples of proposed interior finish materials accompanied by all physical characteristics and performance test data shall be submitted to GTAA Engineering and the CCPO for approval for use prior to actual installation.

4 Exposed poured-in-place concrete intended as a final finish material shall have all voids filled, be ground smooth of defects, and sealed before applying any other finish.

5 If new finish material is to be installed on existing surfaces, then all existing finish materials, glues, bonding agents and the like shall be removed prior to installation of any new materials.

4.6.4.7 Wall Base and Wall Protection

1 Wall base in Terminals along walls and columns of Public Spaces shall have a height of 250mm in Terminal 1, 200mm in Terminal 3, composed of highly durable and cleanable materials such as stainless steel or ceramic tile to match the standards specific to the Building. Whenever possible in Terminal 3, the base should be 250mm provided that it is in a renovated area that is not adjacent to an area with a wall base of 200mm, where the height difference would be noticeable.

2 Where movement of materials and wheeled apparatus is part of the use of the Building floor area including service areas, corridors, freight elevators, and loading docks, heavy-duty wall protective devices and materials shall be specified to resist wall damage and deterioration.

3 Corner protection of wall materials subject to damage by baggage carts shall be provided as determined by the GTAA. Wall protection of gypsum board in areas used for baggage carts shall have adequate base and crash rail devices installed to match standard for the area.

4.6.4.8 Flooring Materials

1 A minimum Dynamic COF of 0.6 is required for all flooring.

2 The ANSI A137.1-2012 Specifications for Ceramic Tile standard shall be followed.

3 The ANSI A1264.2-2006 Provision of Slip Resistance on Walking/Working Surfaces standard shall be followed.

4 Provide copies of all current test results under wet, dry and treated conditions on all the specified flooring as per Standard ANSI A137.1-2012 for review and approval by Corporate Risk.

   a. Hard surface flooring should be properly installed, in a stable, firm and slip resistant manner.

   b. The tile supplier should provide details, procedures and/or training for the proper maintenance and floor care of their products, which should be followed by the Tenant going forward.
5 All transitions between the different flooring types need to be smooth and level in conformance with the National Building Code, to ensure no tripping hazard is created.

4.6.4.9 Ceiling Heights

1 Design of high ceilings in Public Spaces shall consider lighting levels, ease of relamping fixtures, equipment servicing, material replacement and refinishing, and the capability of achieving other maintenance operations.

2 Design of suspended ceiling systems shall consider the requirements for accessing ceiling spaces to perform maintenance and future installation Work.

3 All equipment, piping, conduit, raceways, and any other suspended Building assemblies and components installed in ceiling spaces over vehicle routes within the Terminals shall maintain an overhead minimum clearance above the road surface in accordance with the height restrictions established specific to the Building.

4 Finished ceiling height must be a minimum of 2400 mm.

4.6.4.10 Access Doors/Panels

1 Access doors and removable panels in ceilings and walls to provide service access to valves, pull boxes, dampers, and control devices shall be considered in the design, and provided at locations coordinated with the Contractor’s mechanical and electrical trades and the architectural/interior designer.

2 All access doors and panels shall be fully lockable and tamper-proof where accessible in Public Spaces and Restricted Areas.

3 All access doors should be constructed square and plumb to adjacent surfaces.

4.6.4.11 Doors and Frames

1 Steel doors specified shall be commercial grade hollow metal fabrications, adequate for the specific use and durability intended, reinforced and prepared for hardware.

2 Steel frames specified and installed shall be commercial grade welded fabrication, adequate for the specific use and durability intended, and reinforced and prepared for hardware. Knockdown frames are not permitted in the Terminals, or anywhere installed as a security door (Article 4.6.6.2).

3 Aluminum doors specified and installed shall be commercial grade extruded aluminum fabrication, reinforced and prepared for hardware. Exterior doors shall be insulated type (thermally broken).

4 All door openings installed in GTAA-maintained Buildings shall be labelled with a door tag with the door number that shall be assigned by the GTAA and installed in accordance with the standards specific to the Building.

5 Door swings shall not be permitted to encroach into corridors and concourses, unless recessed or protected by a barrier to prevent interference with immediate pedestrian circulation.
6 Entry doors shall be designed to minimize air infiltration during operation by including energy conservation solutions acceptable to the GTAA.

7 Automatic entry door devices shall be designed and installed to minimize unnecessary door openings including energy conservation solutions acceptable to the GTAA.

8 Sliding doors shall be top-rail supported only for all GTAA-maintained Buildings with threshold detailing that will not create a tripping hazard and be in conformance with the National Building Code.

4.6.4.12 Electromagnetic Locking Devices

1 The design and installation of all electromagnetic locking devices within the Airport shall be reviewed by the GTAA.

2 Electromagnetic locking devices and the primary door opening hardware shall be designed and installed in conformance with CAN/ULC-S533 - Standard for Egress Door Securing and Releasing Devices; and the locks and its associated hardware are labelled and listed by a testing laboratory accredited by the Standards Council of Canada.

3 A separate drawing shall be submitted to CCPO for all electromagnetic locking devices proposed to be installed at the Airport. The drawing shall include the following information:
   a. specifications specific to the electromagnetic locking devices proposed for installation, including product cut sheets;
   b. the sequence of operation for the electromagnetic locking devices;
   c. the egress path(s) to an exit in the rooms/areas where the electromagnetic locking devices are proposed to be on egress and/or exit doors;
   d. dimensioned drawings to indicate the locations of manual pull stations, signage, card swipes, and card readers; and
   e. single line diagrams to indicate the wiring method of the electromagnetic locking device, controller, manual pull station, and other electrical components.

4 Upon completion of the installation of the electromagnetic locking device, the following items shall be submitted prior to final inspection and demonstration to the CCPO and the ICC:
   a. sign-off from both the GTAA ITM and GTAA Corporate Safety and Security departments,
   b. a fire alarm verification report that includes all new devices (e.g., manual pull stations, electromagnetic locks), and
   c. confirmation in writing from the Engineer of Record that the demonstration was successful, and the devices have been installed and verified as per CAN/ULC-S524-01, Standard for the Installation of Fire Alarm Systems and CAN/ULC-S537-04, Standard for the Verification of Fire Alarm Systems, and as per the Construction Drawings.
5 Upon receipt and acceptance of all final documentation, a final inspection and acceptance test shall be scheduled with the Construction Compliance & Permits Office (CCPO), GTAA Fire Prevention and the ICCC. The final inspection and acceptance test will include the full demonstration of the operation of the electromagnetic locking devices.

6 Upon completion of an electromagnetic locking device an inspection certificate from the Electrical Safety Authority and the GTAA are required before it is activated and placed into operation.

4.6.5 Access Control and Security Systems

4.6.5.1 Scope
1 The requirements of this Subsection pertain to the Primary Security Line (PSL), inspection services areas, Sterility Areas, safety/security areas, and the design, fabrication, installation and/or Construction of components forming any part of these areas or as determined by the GTAA Corporate Safety and Security Department.

4.6.5.2 General Requirements
1 Any new installations of access control and security systems including devices, components, etc. shall meet the current standards as established by GTAA Corporate Safety and Security Department.

2 The GTAA Corporate Safety and Security Department shall review and approve any new systems, alterations and/or substitutions of devices and components of existing systems prior to installation.

3 Electromagnetic lock, key card systems, CCTV systems, door contacts, sound alarms, etc., that are monitored by the Airport Security Operation Centre, shall require final connections to the monitoring system to be performed by the designated Contractor of the GTAA.

4 All electromagnetic lock installations, where not part of a Construction Contract, require a Facility Alteration Permit before commencing such installations.

4.6.6 Primary Security Line Design and Construction

4.6.6.1 Walls and Windows
1 All Construction shall conform to GTAA Standards.

2 Any changes must be coordinated with the GTAA Corporate Safety and Security Department and Transport Canada.

3 Permanently installed walls and partitions forming part of the PSL shall be designed and constructed as follows:
   a. full height from the floor to the underside of the floor or roof deck structure above where they form part of a required smoke or fire rated separation in the Building, or
b. partial height from the floor to 150 mm above the underside of a suspended ceiling assembly with heavy gauge 19 mm expanded steel mesh supported on 92 mm steel studs at 400 mm spacing extending to the underside of the floor or roof deck structure above where they are not part of a required smoke or fire rated separation in the Building.

c. partitions in either of the above applications shall be constructed of one of the following:
   i. minimum 140 mm concrete block wall, or
   ii. gypsum board partition assembly comprised of 92 mm steel stud framing at 400 mm spacing with 16 mm gypsum board screw-fastened to public side, and heavy gauge 19 mm expanded steel mesh screw-fastened directly to the studs (full height of partition) on the restricted side and finished with 16 mm gypsum board.

4. Any opening or penetration made through either assembly in Subsection 1 greater than 150 mm x 150 mm in size shall be protected by a steel grille or mesh fastened from the Restricted Area side.

5. At no time will the overall physical integrity of the existing Primary Security Line wall Construction be impacted or altered without the approval of the GTAA Corporate Safety and Security Department.

6. Within Terminals, high-risk and secure areas containing systems, activities and procedures classified as “sensitive operations” by the GTAA, security shall not be provided by any means of visual surveillance by Persons from the non-restricted side of the PSL wall.

7. Windows permitted to form part of the PSL wall shall be specified to have pressed steel or aluminum frames fastened to the wall assembly from the restricted side. Glazing shall be wired safety glass, laminated safety glass or listed plastic security panels, glazed and secured in the frame from the restricted side.

8. Windows in secure areas requiring an access opening(s) to serve persons shall have a security screen in place and a closure panel mounted on the restricted side locked by hardware acceptable to the GTAA Corporate Safety and Security Department.

4.6.6.2 Doors and Frames within the PSL Wall

1. All door types shall be reviewed by the GTAA Corporate Safety and Security Department to determine the level of security required for the areas they serve.

2. Doors and frames forming part of the PSL shall be designed and constructed in accordance with the following:
   a. GTAA Electronically Monitored Door Assemblies – Design and Construction Requirements,
   b. GTAA IT&T Electronic Safety and Security Specifications, and
   c. Requirements of the GTAA Corporate Safety and Security Department.
d. All doors must receive all required regulatory signage in accordance with the requirements of the *National Building Code*.

3 Doors designated as exits from rooms, areas and the *Building* itself shall be equipped with hardware suitable and compatible for both functions of life safety and *Airport* security and installed in accordance with the applicable regulations and the *GTAA* standard security door types.

4 Overhead and sliding type doors shall have rail and track designs and hardware that prevents the door from being removed and is secured on the non-secure side.

4.6.6.3 *Security Door Hardware*

1 Swing type doors forming part of the *PSL* shall have not less than 1.5 pairs of heavy duty, stainless steel ball bearing type hinges or butts having concealed and tamper-proof (irremovable) pins and are designed and fabricated to resist intentional forced entry when the door is in the secured position.

2 Electromagnetic locks shall be installed to the *GTAA* standard for doors that are not for exit purposes but shall comply with the *National Building Code*, *NFPA 100* and *2009 IBC* for door release requirements where installed on exit doors. All such doors shall be inspected and operationally demonstrated in conjunction with the *Building* fire alarm system by *F&ES* and *GTAA* Corporate Safety and Security Department prior to using.

4.6.6.4 *Security Screens*

1 Openings required in *PSL* walls greater than 150 mm x 150 mm in size shall be protected with a security screen to prevent intentional entry into the *Restricted Area*.

2 Security screens shall be fabricated using one of the following methods:
   a. welded steel grille using 15 mm diameter round, or 15 mm x 15 mm square solid bar stock arranged in a square grid pattern with clear spacing not larger than 50 mm, welded to a 50 mm x 50 mm x 6 mm welded perimeter steel angle frame. The frame shall be fastened into the wall assembly opening with a minimum of 2–6 mm diameter steel screws in each side of the frame (eight total) and the screw heads tack welded to the frame;
   b. 3.65 mm heavy-duty steel welded mesh with no opening larger than 50 mm and screw fastened directly to the wall framing forming the opening with non-removable type screws.

4.6.6.5 *Roof Access and Floor Openings*

1 All *Building* roof areas that overlook adjacent *Restricted Areas* shall have controlled access for authorized persons only. In such case, the roof assembly and any openings, hatches and penetrations larger than 150 mm x 150 mm in size form part of the *PSL* and shall be an adequate security barrier.

2 Openings shall be protected using a security screen method specified in Article 4.6.6.4.
3 Hatches and doors leading to hatches in roof assemblies shall be equipped and secured by hardware approved by the GTAA Corporate Safety and Security Department.

4 All other Building roof areas shall have hatches and doors that are secured by lockable hardware in accordance with the controlled access provisions of the GTAA Corporate, Safety and Security Department.

4.6.6.6 Service Tunnels and Maintenance Holes

1 All underground chambers and/or maintenance tunnels forming part of or crossing the Primary Security Line shall be designed and constructed to have controlled access for authorized persons only. In such cases, any openings, hatches and penetrations larger than 150 mm x 150 mm in size shall be protected with an adequate security barrier, or security screen method specified in Article 4.6.6.4.

2 Openings for underground chambers and maintenance holes in non-Restricted Areas that allow access to Restricted Areas via underground maintenance tunnels shall have their covers secured by welding to cover frames, or other tamper-proof means acceptable to the GTAA.

4.6.6.7 Primary Security Line Fencing

1 Where fencing designed to form part of the PSL is specified to be installed in an open landscaped area contact the GTAA Corporate Safety and Security Department for the current Fencing Design and Installation Standards.

2 The PSL fence Clear Zones shall be kept clear of objects such as parked vehicles, trailers, cargo containers, equipment, material stockpiles, snow and soil piles, etc. Such objects may be removed by the GTAA without notice at the expense of the Persons responsible.

3 Vegetation growth shall be kept short along the PSL fence on both sides to allow for ease of visibility and surveillance.

4.6.6.8 Airside Access Gates in Fences

1 Design and fabrication of gates and the support structures and installation methods shall follow the requirements of the GTAA standard drawings for each type specified and/or approved by the GTAA Corporate Safety and Security Department.

2 Automatic gate operators shall be in accordance with the GTAA standard and installed to the manufacturer’s specifications that includes a 220 V, 1 phase, 60 Hz reversible motors internally protected for overload and under voltage during start and run windings and controlled by an adjustable internal timer. Control unit shall have additional capacity for other features and a manual disconnect for manual operation of the gate. Install operator unit on a concrete pad at a location and height above grade as specified on the GTAA standard drawings.

3 Vehicle detection and sensing unit shall be specified using manufacturers’ that have standard units that operate in a temperature range from -40°C to 71°C and have
electrical grounding and lightning protection features. Units shall be capable of automatically self-tuning after the initial set up and include a vehicle safety edge.

4 Operation and arrangement of equipment at access gates shall permit in-bound drivers of vehicles entering the Restricted Area to stop at a card reader unit and enter their personnel identification number to activate the gate opener.

5 An intercom unit beside the card reader unit placed on the in-bound and out-bound sides of the gates shall be mounted on a painted hot-dip galvanized HSS post and base plate, bolted to a concrete pad. Incoming calls shall be automatically announced with a soft chime from speakers with permanent magnets.

6 CCTV surveillance will be provided at in-bound vehicle, out-bound vehicle and pedestrian access points. Adequate lighting for these areas that provides natural colour rendition and clarity of the objects to be identified as part of the surveillance shall be specified. The photometric data for the fixtures shall include the lamp type and the lumen level and distribution pattern in accordance with IESNA testing standards.

7 Refer to GTAA ITM Electronic Safety and Security Standards for specifications for card readers, intercoms, and CCTV equipment.

4.6.6.9 Manned Gates in PSL Fence

1 Guard booth units and gate operator mechanism shall be designed, fabricated and installed in accordance with the GTAA standard drawings.

4.6.6.10 Security Lighting

1 PSL fence lines extending at least 150 m away from the face of Terminals, on apron areas at passenger boarding points and at Restricted Area access control points, shall be provided with security lighting.

2 Lighting shall be designed and installed in such a manner to aid security guards and camera surveillance equipment in verifying the details of persons and vehicles being monitored.

3 Placement of light fixtures shall not interfere with night visibility nor create glare for the Air Traffic Control Tower operators and pilots.

4 Placement of light fixtures shall illuminate the entire area it is serving without dark spots.

5 Power requirements shall provide for an emergency power circuit with both circuits in a duct bank routed inside the Restricted Area.

4.6.7 Structural Design

4.6.7.1 General Requirements

1 All Buildings and other types of Structures used for supporting floor areas, roofs, and equipment within all Airport Areas shall be designed by a Professional Engineer. Drawings, specifications and calculations prepared by the Professional Engineer shall conform to all Applicable Codes and Standards for such Structures, be signed and
sealed by the Professional Engineer, and be submitted to the CCPO for review before erecting.

2 Notwithstanding the CCPO’s review set out in Sentence (1), the GTAA is not responsible for the adequacy, correctness or completeness of any structural design prepared by a Professional Engineer. All such responsibility remains with the Professional Engineer designing and/or inspecting the Structure and adjoining Construction on behalf of the Tenant or the GTAA.

3 All surface penetrations in any concrete Structure shall be kept to a minimum and shall be planned in accordance with the GTAA Surface Penetrations Guidelines regarding coring, drilling, chipping, cutting, etc. Where possible, installations shall utilize existing penetrations. If new penetrations are unavoidable, layout locations shall be reviewed by the Project Structural Engineer in accordance with the GTAA Surface Penetration Guidelines. Where required the location of the coring, etc., must be revised to avoid damage to embedded structural components and building services.

4 Coring is not permitted on load bearing columns unless approved in advance by the GTAA Engineering. Where coring is permitted, the voids must be patched with materials that match or exceed the existing materials for strength. Testing must be conducted by the Contractor of the replacement material to verify that the required material strength has been achieved.

4.6.7.2 Loading of Structures

1 Construction which involves applying new and additional large loads to existing Structures (including Buildings, vehicular and pedestrian bridges, tunnels, overhead sign structures, and utility bridges) resulting from assemblies and equipment being installed or removed by lifting apparatus at a concentrated point or area shall be verified in writing by a Professional Engineer that the Structure will safely sustain and support the new loads.

2 Existing Structures shall be reviewed by a Professional Engineer for any proposed changes of use or occupancy resulting in structural load changes. The structural review shall be done according to Professional Engineer Ontario Structural Condition Assessments of Existing Buildings and Designated Structures Guideline latest version. Any modifications that are required to reinforce existing Structures shall be indicated on drawings and details with design calculations prepared, signed and sealed by a Professional Engineer. The structural loads shall be included on submitted drawings and requested reports.

3 Temporary loading of structural systems, such as concrete slabs, suspended floors and roofs by construction vehicles, equipment, materials and /or debris stockpiled, while performing the Construction in such a manner that imposes loads beyond the design capacity of such Structure, are prohibited. The Contractor shall be responsible for obtaining calculations prepared by a Professional Engineer and obtaining prior authorization from the GTAA for such loading requirements beforehand. Any resultant damage to the Structure caused by excessive
Unauthorized loading and all costs incurred for any repairs of such damage is the responsibility of the Contractor.

4.6.7.3 Expansion Joints

1. Expansion joints shall be designed, installed and constructed to Applicable Codes and Standards.

2. Where existing expansion joints are present and/or where new expansion joints are required as part of the Construction, care shall be taken to properly detail floors, ceilings and walls adjacent to such joints to allow for the calculated movements of the Structure, and to ensure the safe transition of vehicles, pedestrians of all types, and carts, as well as Building systems from one side of the joint to the other.

3. Expansion joints should be designed considering strength of components and durability.

4.6.7.4 Attachments to Structures

1. Suspended ceiling assemblies may be supported by, or fastened directly into, metal floor decking provided all utilities buried or concealed within roof or floor deck assemblies have been identified and located in accordance with the procedures set out in Subsection 7.9.3 and Article 7.7.3.6 of this Code.

2. Suspended ceiling assemblies shall not be suspended from the bottom flutes of metal roof decking but be suspended from the Structure by direct or indirect methods.

3. All mechanical and/or electrical equipment including associated piping, ductwork, conduit, devices, suspended appliances and/or any other similar installation shall not be supported by, or fastened directly into, metal roof or floor decking. Such assemblies shall be supported by supplemental support systems attached only to structural framing members.

4.6.8 Building Mechanical Systems

4.6.8.1 Water Main and Hydrant Systems

1. All design and installations for the Airport water main and hydrant system must comply with all Applicable Codes and Standards for such Construction and must be prepared and reviewed by a Professional Engineer. The basis of such designs shall include obtaining a recent (within the last 12 months) system flow test within the vicinity of any extension or alteration proposed.

2. The design and installations of Airport water main supplies must follow the Region of Peel By-law Number 10-2017 - A by-law respecting the prevention of Backflow into Municipal Drinking Water System of The Regional Municipality of Peel.

3. Drawings, specifications, calculations and Shop Drawings for the water main system shall be signed and sealed by a Professional Engineer and submitted to GTAA Engineering for review prior to installation.
Design Requirements

4 Hydrants shall be installed in accordance with the Region of Peel Public Works Watermain Design Criteria and the requirements of the F&ES.

5 Hydrants are to be installed on 150mm diameter or larger water mains with the maximum allowable spacing measured along the right-of-way not to exceed 100m.

6 Hydrants that may be subject to vehicle damage shall be protected with 100mm diameter, concrete-filled, steel pipe bollards.

7 Refer to the GTAA Engineering Design Standards for more detailed information and specifications.

4.6.8.2 Fire Suppression, Sprinkler and Standpipe Systems

1 Automatic sprinkler protection shall be installed for all new Construction and/or renovated Building areas where required by this Code. Sprinkler protection must be designed, installed and maintained in full compliance with the following:
   a. National Building Code and National Fire Code requirements,
   b. National Fire Protection Association (NFPA) standards, and

2 Portable fire extinguishers shall be selected and installed in conformance with the National Fire Code and NFPA 10 and must be reviewed and approved by the F&ES.

   Note: Portable fire extinguishers for all GTAA owned, occupied and operated facilities will require a minimum rating of 6A 80BC.

3 All fire protection system installations must be performed by established sprinkler systems Contractors with a minimum of ten years related experience in the industry and/or are members of the Canadian Automatic Sprinkler Association and/or employ personnel who have been trained and licensed by the Sprinkler Fitters’ Union.

4 All automatic sprinkler systems shall be supervised by a central monitoring facility in accordance with the National Building Code and National Fire Protection Association (NFPA) requirements.

5 All incoming water mains supplying fire suppression systems shall be controlled by a Post Indicator Valve (PIV) that is electrically supervised through the Building fire alarm panel.

6 All sprinkler system design and equipment specifications and Shop Drawings shall be signed and sealed by a Professional Engineer and submitted to the CCPO for review.

7 Windows facing aircraft movement areas shall be provided with exterior mounted deluge sprinkler coverage at each panel in accordance with NFPA 415.

8 Only hydraulically designed systems are permitted complete with hydraulic calculations and supply flow data. Submissions require manufacturer specification data, brochure cuts of system components, and Shop Drawings that indicate all system information, hydraulic design areas and reference points, flow data information, piping layouts with pipe sizes, equipment locations, sections and details, and other relevant or required information.
Hydraulically-designed systems shall be based on the actual static pressure and flow data of water available to the Airport as verified by a recent (within the last 12 months) pressure test report as specified by the GTAA Engineering for the specific area. Fire pumps intended to increase the system pressure shall only be used where deemed necessary by the GTAA.

Provide sufficient isolation valves and individual check valves for each Building module and system zone to achieve localized shut-downs for system drain-downs and re-filling when required for maintenance and alterations.

Shut off valves shall be located at grade level of Buildings in a designated valve room wherever practical.

Sprinkler alarm valves and flow switches shall be piped separately to an indirect drainage point in the system.

All dry pipe system drum drip auxiliary drains shall be heat traced and insulated.

All new and altered sprinkler, standpipe, fire hose and Siamese pipe systems in GTAA-maintained Buildings shall be painted and have coloured banding labels.

Upon completion of all fire protection system installations, and prior to acceptance testing by the GTAA, the fire protection system Contractor shall provide the CCPO and the ICC with completed Contractor’s Materials and Test Certificates. This is required for both above ground and underground fire protection systems.

All new fire suppression systems shall undergo testing and acceptance demonstrations by the GTAA and the ICC. GTAA Environmental Services must be notified prior to testing any systems containing foam or glycol to ensure that the testing procedures proposed follow all environmental requirements. In addition, a detailed disposal plan on how the spent material will collected and disposed of shall be provided to GTAA Environmental Services.

For specific areas of Construction to be occupied by federal employees, acceptance may also be required from Human Resources Development Canada involving their Labour Program - Fire Protection Services as determined and coordinated by the CCPO.

Testing shall be performed by a licensed independent sprinkler/fire suppression testing company acceptable to the GTAA.

Any addition to sprinkler system piping may be subject to pressure testing to 200 psi for a period of two hours and a new Contractor’s Material and Test Certificates being provided.

As-built and Record Documents shall be submitted to the GTAA Engineering data department in accordance with Part 9 of this Code.

Prior to conducting final inspection and acceptance testing of a fire protection/suppression system, a signed Maintenance Contract must be in evidence and presented to the GTAA outlining the maintenance and testing agreement between the Building owner, Tenant, lessee, or other party and an approved sprinkler system testing Contractor.
**4.6.8.3 Heating, Ventilation and Air Conditioning Systems**

1. All HVAC equipment designs, and installations must comply with the latest editions of all *Applicable Codes and Standards*, ASHRAE, ASME and ASTM.

2. All HVAC equipment designs and installations within *GTAA-maintained Buildings* and *Structures* shall also comply with the *GTAA Engineering Design Standards*.

3. Selection and sizing of systems, equipment and controls shall take energy conservation and performance into consideration during the development of specifications.

4. For all *GTAA* owned and maintained *Buildings*, the installation and *Maintenance* of HVAC systems must adhere to Federal Halocarbon Regulations, 2003. Required forms and equipment tags can be obtained from the *GTAA*.

5. Submit heat gain/heat loss calculations prepared by a *Professional Engineer* to the *Construction Control & Permits Office (CCPO)* for review where alterations to, extensions of, or additions to existing *Building* systems are contemplated.

6. All new HVAC equipment in *GTAA-maintained Buildings* shall be equipped with direct digital controls (to match existing HVAC equipment) and connected to the Building Management system (BMS). Pneumatic controls are not permitted.

7. Food and Beverage spaces with cooking appliances shall provide appropriate kitchen exhaust system including ULC listed hood, exhaust ductwork, make up air and fire suppression system conforming to NFPA 96 - *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations* and as determined by *GTAA’s Fire Prevention division*. Submit calculations indicating the exhaust system is sized according to the cooking needs. This system shall always maintain the space in negative pressure to guarantee the food and cooking odours do not migrate outside the food and beverage space. *All new cooking systems and equipment must be designed and installed to be easily accessible for Maintenance and cleaning. If access cannot be safely achieved from the floor level, work platforms and/or other safety measures must be provided as detailed in NFPA 96. Cooking equipment and systems will not be allowed to be put into operation until it is demonstrated to the CCPO that safe access has been achieved.*

8. If the HVAC system is operational during *Construction*, clean the ductwork and replace existing filters to ensure proper operation of the HVAC system during *Construction* and prior to occupancy.

9. A certified balancing *Contractor* approved by the *GTAA* shall balance the HVAC system. Hydronic systems shall be balanced for specified design flow rate at a system head. The final balancing report including schematic diagram of each system shall be submitted to the *CCPO* for review and approval.

10. Provide identification to all new HVAC equipment including valves, ductwork and piping as per “*GTAA Identification and Labeling Standards*”. Labels shall be permanently affixed to the equipment and piping.
4.6.8.4 **Plumbing Systems**

1. The design and the installation of the plumbing system shall be in accordance with *National Plumbing Code* and specific requirements as may be determined by the *GTAA*.

2. All plumbing installations within *GTAA*-owned and *maintained Buildings* and *Structures* shall comply with the *GTAA Engineering Design Standards*.

3. All piping shall be flushed thoroughly to *Region of Peel Standards* before connecting to existing *Building services* and prior to putting the system or section of the system into service.

4. All domestic hot and cold-water supply piping shall be Type “L” copper.

5. All equipment, appliances and controls connected to the *Building* plumbing systems shall be located in areas and spaces easily accessible for servicing and inspection.

6. All plumbing installations shall be tested and inspected at the rough-in and final stages of completion by the *GTAA Plumbing Inspector* as arranged through the *Construction Control & Permits Office (CCPO)*.

7. Fixtures in a food and beverage areas that discharges sewage that includes fats, oils or grease shall discharge through a fully automatic grease interceptor also known as grease recovery device. Where permitted by this *Code*, dishwasher discharge shall also be connected to a grease recovery device. The installation, testing, maintenance and performance of the interceptor shall comply with *CAN/CSA B-481* and manufacturer requirements.

8. Provide identification to all new piping and utility systems as per *GTAA “Identification and Labeling Standards”*. Labels shall be permanently affixed to the equipment and piping.

4.6.9 **Building Electrical Systems**

1. The Canadian Electrical Code shall be applied to the design of all *Airport Areas* except for connections to utility services, which shall also comply with respective utility provider standards.

2. All electrical construction is subject to inspection and acceptance by the Electrical Safety Authority (ESA) for Canadian Electrical Code regulations. *Contractors* are responsible for arranging, obtaining and paying for all necessary permits. Such inspections shall be arranged before installations are covered and concealed.

3. An Electrical Safety Authority inspection certificate is required with a copy submitted to the *CCPO* before use or occupancy is granted. The ESA Certificate must indicate the appropriate *Project* number, location and *Project* description, which must be provided to the ESA *Inspector* by the requesting *Contractor*.

4. Refer to *GTAA Engineering Design Standards* for guidance in the design of electrical systems for *GTAA-maintained Buildings* and *Structures*.

5. Selection and sizing of systems, equipment, controls, devices and fixtures shall take energy conservation and performance into consideration during the development of
specifications. All electrical equipment/fixtures must be CSA, ULC, cUL or an approved equivalent.

6 Provide identification to all power distribution equipment as per “GTAA Identification and Labeling Standards”.

7 For new or modified electrical equipment, conduct Arc Flash evaluation and provide arc flash and shock hazard warning labels that comply with the latest edition of CSA-Z462 (Workplace Electrical Safety) on switchgears, switchboards, transformers, motor control centers, panel boards, motor controllers, disconnect switches, and other electrical equipment. Arc Flash analysis shall be completed by a Professional Engineer and shall include at minimum:
   a. Computer modeling of electrical system
   b. Arc flash working distance
   c. Required PPE FR clothing category
   d. Permanent arc flash labeling compliant with CSA-Z462
   e. Coordination Studies performed in EasyPower format
   f. Electronic copies of the model and report delivered to GTAA

8 With regards to Power Quality – Harmonics – comply with IEEE519 for total harmonics distortion; (THD shall be less than 5% with no single harmonic exceeding 5%). Verify compliance once the system is in operation by carrying out harmonic analysis. Submit study details to GTAA Engineering for review.

9 At the completion stage, both Electrical As-Built Documents and Record Documents shall be submitted as defined in Section 9.2.

4.6.10 Fire Alarm Systems

4.6.10.1 Systems Design

1 Fire alarm and emergency voice communications systems and associated field devices shall be UL or ULC listed as per applicable standards. Ancillary devices, cables, wires, conduits, standard electrical back boxes, etc. shall be CSA-approved.

2 Fire alarm system design and equipment data proposed shall be submitted to the CCPO and the ICCC for review. The submittals shall include equipment lists, manufacturer specification data, brochure cuts of system components including the make and model number, fire alarm panels, all detection devices, and all alarm supervisory and transmitting devices, etc.

3 Drawings and specifications indicating the layout of the fire alarm system and devices, including single-line diagrams, sequence of operation and connections to GTAA-maintained systems, etc. shall be reviewed by GTAA Engineering before starting any installations.

4 Additions and alterations to fire alarm systems and any other systems that are interconnected to it shall use components and devices manufactured by the same supplier of the Building system within a GTAA-maintained Building to ensure compatible connections and integrity of the system in accordance with the National Fire Code.
Prior to installation, the GTAA Corporate Safety and Security Department shall review and approve access control systems forming part of the PSL connected to the fire alarm system.

4.6.10.2 **Verification—General**

1. All Fire Alarm Systems shall be inspected, tested and verified by the Contractor.

2. Verifications are to be performed by and/or supervised by fire alarm technicians registered by, and in good standing with, the Canadian Fire Alarm Association, in accordance with the following:
   a. One-person verifications are not acceptable;
   b. Trainee technicians (maximum of two per technician) may assist the supervising technician;
   c. If the system is of conventional design, the supervising technician must be knowledgeable on the specific equipment to be verified;
   d. If the system is of addressable design, or is software driven, or is a network system – then the supervising technician must have received factory-authorized training, and must be current on that training, related to the specific equipment to be verified.

3. A verification report is to be issued upon successful completion of the verification. The report is not to be issued to the CCPO and the ICCC until the system is clear of all deficiencies. The report is to be signed by the supervising technician. (CFAA registration # is required).

4. For fire alarm systems with Graphic Work Stations (GWS) where Projects include extensive addition to or reconfiguration of the floor area, the GWS screens must be updated to reflect the current architectural layout of the Building area. All new devices must be programmed and verified on both the fire alarm system and the GWS and included in the final verification report submitted with copies of any new screens programmed to the CCPO.

5. The installing Contractor is to issue a certificate (or letter) stating that they installed the system (materials and methods) in accordance with the applicable requirements contained in CAN/ULC-S524; Standard for The Installation of Fire Alarm Systems, and in accordance with the applicable Electrical Code.

6. The System Design Engineer shall provide periodic inspections and final site review, in accordance with the Professional Engineers Guideline for General Review of Construction. The System Design Engineer shall provide a letter confirming that the installation has been completed in general conformance with the Construction Documents.

7. Where the CCPO has approved a phased occupancy/use, all devices within the specified phase are required to be verified in accordance with CAN/ULC-S537, prior to issuance of an Occupancy/Use Permit. Upon completion of all subsequent phases, the entire fire alarm work within all phases is required to be re-verified in accordance with CAN/ULC-S536.
4.6.10.3 Verification—New Systems

1 New fire alarm systems shall be tested in conformance with the current standard, CAN/ULC-S537 and CAN/ULC-S536, to ensure satisfactory operation after completed.

4.6.10.4 Verification—Modifications to Existing Systems

1 Prior to commencement of any fire alarm work, the existing fire alarm system, within the Place of Work, is required to be reviewed by a Professional Engineer to determine the existing condition, design basis and scope of the Work.

2 Modifications to fire alarm systems shall be tested in conformance with the applicable requirements of CAN/ULC-S537, to ensure satisfactory operation.

3 An operational test of all devices connected to the affected data communication link shall be performed or, in lieu of this operational test, a comparison of the “before” and “after” software utilizing mediums such as a printout or compare programs to confirm the correct sequence may be considered. A comparison must be accompanied by a letter of explanation from the Professional Engineer of record for the Project.

4.6.11 Grounding and Lightning Protection Systems

4.6.11.1 Grounding for Structures and Systems

1 All metallic structures exposed to the exterior shall be provided with a grounding system that complies with the Canadian Electrical Code specific to the application and to the acceptance requirements of the Ontario Electrical Safety Authority (ESA).

2 All metallic structures exposed to the exterior such as light poles, aerial structures, manhole covers, and any other in-ground fixtures shall be bonded to the grounding conductor and grounded to separate electrodes.

3 Fence enclosures around or adjacent to electrical substations shall be grounded to electrodes with flexible braid at 15 m intervals with bonding jumpers at gates and fence openings to provide metallic continuity.

4 Apron ground connections for aircraft refuelling shall be connected to ground rods driven at each parking area or hydrant fuelling pit. All grounding test points shall be accessible for verification.

5 A separate ground bus connection shall be provided between communication room equipment and the associated ground grid using insulated wire.

6 A separate grounding conductor shall be provided in all raceway and conduit systems containing power circuits for indoor lighting fixtures and receptacles. The ground conductor shall be insulated, and colour coded green, sized in accordance to the Canadian Electrical Code. EMT shall not be used as a substitute grounding conductor.

7 A grounding conductor shall be provided for all power circuits over 600 V.
Lightning Protection for Buildings and Structures


2. The Consultant shall determine the requirements for lightning protection for all permanent and/or temporary Buildings and Structures, for acceptance by the Construction Compliance & Permits Office.

3. Lightning protection conductors shall be installed in conduit if routed inside Buildings. The preferred method is to run lightning conductors down at the periphery of a Building rather than the interior.

4. A lightning warning and protection system is required for all apron and ramp operations areas.

5. Design and install lightning conductor system so as not to cause interference with Airport data and communication systems.

6. All connections shall be made using CSA-approved compression type connectors.

7. Grounding rods shall be minimum 20 mm diameter and 3 m long of copper or copper-clad steel material. Top connections shall be contained in precast concrete maintenance holes with a lid, and be accessible for inspection, in accordance with GTAA standard details. All underground connections shall be made using CSA-approved compression type connectors installed using tools and methods recommended by the manufacturer.

8. Maintain a distance of 2 m between lightning rod conductors and building electrical conductors and equipment. Lightning rod conductors shall connect to separate ground electrodes. Where separation is not possible, electrodes of two systems shall be connected at or below ground level.

Alternative Design Solutions and Test Standards

Application

1. The CCPO may allow the use of materials, systems or building designs not authorized by this Code, if the proposed materials, systems or building designs will, in the opinion of the CCPO and the respective GTAA technical authority, provide the level of performance that would be achieved by conforming with the requirements of this Code.

2. Where the CCPO allows the use of materials, systems or building designs not authorized by this Code, a record of the decision shall be retained that includes:
   a. the decision and the basis for allowing the use of the material, system or building design, and
   b. all documents in support of the request provided to the CCPO by the Person requesting the use of the material, system or building design.
4.6.12.2 **Acceptance**

1. Materials not specifically described in Division B, Parts 3, 5, 6, 7, 8 and 9 of the *National Building Code*, or which vary from the specific requirements in those Parts, or for which no recognized test procedure has been established, may be used if the Person requesting the use of such material can establish on the basis of past performance, tests described herein, or other evaluation methods, that the use of the proposed material will provide the level of performance that would be achieved by conformance with the requirements of the *National Building Code*.

2. Systems not specifically described in Division B Parts 3, 5, 6, 7, 8 and 9 of the *National Building Code*, or for which no recognized test procedure has been established, may be used if the Person requesting the use of such system can establish on the basis of past performance, tests described herein, or other evaluation methods, that the use of the proposed system will provide the level of performance that would be achieved by conformance with the requirements of the *National Building Code*.

3. Structural designs not specifically described in Division B, Part 4 of the *National Building Code* may be used if the Person requesting the use of such building design can establish that the use of the proposed building design will provide the level of performance that would be achieved by conformance with the requirements of the *National Building Code*.

4. Documentation of an alternative solution shall be provided to the ICCC and the CCPO prior to any installation of the Work related to it in accordance with the Division C, Section 2.3 - Alternative Solutions of the *National Building Code*, and with the intent statements in Appendix A of the *National Building Code* being part of this Article.

5. Where no published test method to establish the suitability of a material or system proposed exists, then the tests used for the purposes of those articles shall be designed to simulate or exceed anticipated service conditions or shall be designed to compare the performance of the material or system with a similar material or system that is known to be acceptable.

6. The results of tests or evaluations based on test standards other than as described in the *National Building Code* may be used for the purposes of Sentence 4.6.12.2(1) if the alternative test standards provide comparable results.

4.6.12.3 **Material Evaluations and Rulings**

1. The following body is designated as a materials evaluation body for the *National Building Code* and for the purposes of this *Code*:
   a. Canadian Construction Materials Centre
      Institute for Research in Construction
      National Research Council of Canada
      Montreal Road
      Ottawa, ON K1A-0R6
Any evaluation and authorization reports obtained from either body mentioned in this Article, resulting from a specific request for such, shall be in writing on the letterhead of the respective body.

Documents received in Sentence (2) above shall be submitted to the CCPO and accompanied by a letter from the Consultant for the Work describing the purpose, the scope of application and referencing the related part of the drawings and specifications, for which an application and issuing of a FAP is made.

4.6.13 Airport Technology Services

GTAA IT Department is the owner of the standards noted below and is accountable for the lifecycle management of technology and all work performed on systems by third parties. Contractors requiring copies of these standards can obtain the current versions from GTAA Director, IT, Airport Development Program (Zeljko.cakic@gtaa.com).

4.6.13.1 Airport Communication Cabling

Any Work related to the installation, termination, testing, decommissioning, design, shop drawings and as build drawings provision for (of) airport communication cabling (copper, fiber, hybrid) shall be completed in accordance with GTAA IT Cabling Specification Standard and associated appendices; only the Work compliant with this standard will be accepted for GTAA IT operations and use.

4.6.13.2 Airport Electronic Security Systems

Any Work related to design, installation, configuration, testing, activation, decommissioning of airport electronic security systems (including but not limited to CCTV, Access Control Public Address and Intercom Systems) shall be completed in accordance with GTAA IT Electronic Security Systems Standard (ESS) and associated appendices; only the Work compliant with this standard will be accepted for GTAA IT operations and use.

4.6.13.3 Telecommunication Rooms

GTAA telecommunication rooms and MCRs shall be designed, built and commissioned in accordance with GTAA IT Telecommunication Room Standard.

4.6.13.4 IT Technology Standards

Any Work related to design, installation, configuration, testing, activation, decommissioning of GTAA technology systems and services shall be completed in accordance with GTAA IT Technology Standard and associated appendices; only the Work compliant with this standard will be accepted for GTAA IT operations and use.
Environmental Requirements

5.1 GTAA Environmental Review

5.1.1 Scope

1 The GTAA performs an Environmental Review for all Projects on Airport Lands, as a method of integrating relevant environmental factors into the Project planning, design, and construction phases to meet the requirements of the Impact Assessment Act, which replaces the Canadian Environmental Assessment Act effective August 28, 2019.

2 Certain Projects will need to be published online on the Canadian Impact Assessment Registry site (the “Site”) to determine if the Project is likely to cause significant adverse environmental effects before a Facility Alteration Permit (FAP) is issued. The public may provide comments on the Site. There is a minimum of 30 days between the notice of intent for the Project being published on the Site and the final notice setting out the determination whether the Project is likely to cause significant adverse environmental effects.

5.1.2 Airport Construction

1 All Construction that occurs at the Airport will be subject to Environmental Review by GTAA Environmental Services. The scope of the Construction will be examined to determine if there will be environmental impacts, and to what degree. The Construction Compliance & Permits Office (CCPO) will receive a Preliminary Environmental Evaluation, generally in the form of Stakeholders’ review comments from GTAA Environmental Services based on its review.

2 Where the Preliminary Environmental Evaluation during the Preliminary Design Review stage identifies potential environmental impacts of Projects initiated by the GTAA and Tenants of the GTAA, the Project Initiator shall respond to those impacts identified in the evaluation, by recommending mitigating measures for each item. Respective mitigating measures must be incorporated by the Applicant into the Construction Documents for obtaining a Facility Alteration Permit (FAP), and such measures will be monitored by the CCPO.
The Preliminary Environmental Evaluation may result in a more detailed review by either an Environmental Screening or an Environmental Assessment, as defined by the Impact Assessment Act (IAA). Any Project that does not meet the IAA inclusion list must undergo the more detailed Environmental Screening, or Environmental Assessment.

Where the IAA requires a detailed Environmental Assessment, a qualified environmental Consultant on behalf of the Project Initiator shall prepare the assessment.

It is recommended that this occur during the Preliminary Design Review stage before applying for a FAP.

The Environmental Assessment prepared must meet all requirements of the IAA.

GTAA Environmental Services can provide information respective to this requirement.

### 5.2 Sustainable Design

#### 5.2.1 Policy

The GTAA is committed to a policy of developing, operating and maintaining the Airport using environmentally sound design. This includes Construction quality, air and water quality, energy conservation, noise reduction, as well as management and recycling practices (where applicable) for waste and hazardous materials reduction and diverting disposal to landfill sites.

#### 5.2.2 Application

1. Meet the minimum requirements listed under section 4.5 of this Code in compliance with ASHRAE 189.1.

### 5.3 Storm Water Management

#### 5.3.1 Scope

1. Airport operations involve the use of a variety of chemicals which, if not properly contained or collected when used by effective design provisions constructed, can have detrimental effects to the surrounding environment, including but not limited to groundwater, and nearby surface waters.
2. Construction activities also have the potential to create environmental damage by causing soil erosion and high levels of sedimentation. Additionally, chemical, fuel, or lubricant discharges from equipment and systems, and contamination by improper disposal of Construction debris may have detrimental effects on the surrounding environment and nearby bodies of water.
5.3.2 Regulatory Compliance

1 The Airport has the potential to affect bodies of water located within the adjoining municipal jurisdictions. The GTAA has developed a Storm Water Master Plan to control run-off and minimize the potential for contaminants to reach surrounding waterways.

2 GTAA guidelines, Federal regulations and municipal guidelines and by-laws provide maximum acceptable limits for effluent compounds.

3 All storm sewer effluent leaving a Building Space or Land Parcel, depending on its destination, shall meet the more stringent effluent limits within the Regional Municipality of Peel By-law 90-90 and By-Law 53-2010, City of Toronto By-law 457-2000 (Chapter 681 of the City of Toronto Municipal Code), and the Canadian Water Quality Guidelines (1999).

4 Storm sewer effluent leaving the Airport Lands shall comply with the Fisheries Act. No person shall dump or release any deleterious substance into a storm drain.

5.3.3 Erosion and Sediment Control

1 Sediment runoff and soil erosion must be controlled to comply with the codes and standards referenced in Sentences 5.3.2(3) and (4). An erosion and sediment control plan must accompany the Construction Documents for each FAP application involving soil or vegetation disturbance. The control plan shall outline the environmental measures to be implemented during construction. All measures to control sediment and soil erosion must be put in place by the Contractor prior to the start of Construction.

2 The Contractor shall inspect the sediment and erosion control measures on an ongoing basis including after any major precipitation event to ensure their effectiveness. It is the responsibility of the Contractor to continually maintain such measures. If any control measure is damaged or its condition has deteriorated, it shall be repaired or replaced by the Contractor at its own expense. If the measure used is ineffective, the Contractor, at its own expense, shall implement another measure acceptable to the GTAA.

3 If dewatering activities are required by the Construction, the Contractor must ensure that no contaminated water is pumped directly or allowed to run-off indirectly into storm or sanitary drains. Water must be treated to control the amount of sediment being discharged and shall not exceed the environmental guidelines specified in Sentences 5.3.2(3) and (4).

4 All sediment and erosion control shall remain in place until enough vegetation is established. If vegetation re-application is required, all seed mix must comply with GTAA standards.

5.3.4 Oil/Water Separators for Storm Sewers

1 Oil/water separators provide a method of removal of sediment and free-phase hydrocarbon product from water prior to discharge to the storm sewer. Buildings or
Structures generating these effluents could potentially contaminate storm sewer systems. Designs for such Projects shall include oil/water separators.

2 Oil/water separators shall be installed in such a manner that they can be easily inspected and maintained on a regular basis. Records of Maintenance must be made available to GTAA Environmental Services upon request.

5.4 Sanitary Sewer

5.4.1 Effluent Limits

5.4.1.1 Scope
The surrounding municipalities have developed sanitary sewer effluent limits to control the level of contamination entering sanitary sewers and local waste treatment plants. These limits are enforced through local municipal by-laws.

5.4.1.2 Regulatory Compliance
The Airport is located within the Regional Municipality of Peel and therefore sanitary sewer effluent leaving a Building Space or Land Parcel shall comply with Regional Municipality of Peel By-law 90-90 and By-Law 53-2010. In some instances, a portion of the Airport drains towards the City of Toronto. In such cases, effluent leaving a Building Space or Land Parcel shall comply with By-law 457-2000 (Chapter 681 of the City of Toronto Municipal Code).

5.4.2 Oil/Water Separators for Sanitary Sewers
1 Oil/water separators shall be included in the Construction of facilities that may produce free phase hydrocarbon product, and oil and grease from kitchens.

2 Other operations that could potentially contaminate the sanitary sewer system include vehicle washing and repair facilities.

3 Contractors shall ensure that no chemicals are used in any operation that could adversely affect the operation of an installed oil/water separator and any subsequent uses by a Tenant.

4 Oil/water separators shall be designed and installed in such a manner that they can be easily inspected and maintained on a regular basis. Records of such Maintenance must be made available to GTAA Environmental Services upon request.

5.4.3 Monitoring Program
1 To ensure compliance with applicable regulations, the Tenant shall establish a monitoring program whereby samples of sanitary sewer effluent are collected on a scheduled basis. Development of this plan shall be based around the required sample parameters found within the Region of Peel Sanitary Sewer-Use By-law 90-90 and By-Law 53-2010.
2 The Tenant is required to prepare and submit a Plan of Operation for monitoring and sampling reports for review by the GTAA Environmental Services when requested.

5.4.4 Flight Kitchens and Other Food Preparation Areas

1 Design and Construction of all food preparation operations shall comply with relevant requirements of the Applicable Codes and Standards. See Section 4.6.4.8.

5.5 Waste Management

5.5.1 Regulatory Compliance

1 The GTAA policy on Construction waste is to reuse and/or recycle a minimum of 85 per cent of all Construction waste including that resulting from alterations and demolition. This includes materials such as concrete, glass, metal and wood.

2 In addition to regulatory requirements, no garbage or hazardous materials from Construction activities shall be disposed of on Airport Lands. Stockpiles of materials shall be removed in accordance with best management practices and in agreement with GTAA Environmental Services. Requirements will be dictated based on specific Project requirements.

3 The Contractor shall conform to the requirements of Ontario Regulation 347 General—Waste Management, for separation and disposal of Construction waste.

5.5.2 Requirements

1 A Waste Management Plan shall be completed by the Contractor prior to starting any Construction and submitted to the GTAA Environmental Services for acceptance.

2 Complete records of all Construction waste that is reused / recycled must be maintained throughout the Construction period and made available upon request to the GTAA Environmental Services for review.

5.5.3 Material Exchange Program

1 Material Exchange is an online platform that facilitates the exchange of materials between organizations and service providers to divert resources from landfill, lower operating costs and promote the move towards a circular economy.

2 In collaboration with Partners in Project Green, Contractors who have material that can be re-purposed, recycled and/or reused are encouraged to list items on the below website to divert items from landfill.

https://www.partnersinprojectgreen.com/your-needs/waste-management/material-exchange/
5.6 **Hazardous Materials Management**

5.6.1 **General**

5.6.1.1 **Application**

1. Hazardous waste must be disposed of in strict accordance with the relevant requirements of the *Applicable Codes and Standards*, such as the *Transportation of Dangerous Goods Act*, *Hazardous Products Act*, and Ontario Regulation 347; General - Waste Management of the *Environmental Protection Act*.

2. Proper identification, handling, control and disposal of hazardous materials are important both from a health and safety perspective, and an environmental perspective. The *Contractor* is responsible for all such identification and handling measures and shall submit a Hazardous Waste Control Plan to *GTAA Environmental Services* for acceptance where construction contains or uses such material.

3. A designated substance survey of the *Buildings* included in the *Project* may be required to meet the requirements of the Ontario *Occupational Health and Safety Act*. If required, a copy of the designated substance survey and a plan of how substances will be removed is required to be provided to *GTAA Environmental Services*. In addition, a closeout report must be provided at the completion of the *Project*.

5.6.1.2 **Regulatory Compliance**

1. For the purposes of protecting the environment and human health at or near the *Airport*, “Hazardous Material” is defined in terms of existing legislation and includes:


   b. "Hazardous Materials" as outlined under the Workplace Hazardous Materials Information System (WHMIS) as established by the *Hazardous Product Amendment Act*.

   c. Other materials posing a threat to public safety and/or the environment as regulated under the *Canadian Environmental Protection Act*.

5.6.2 **Procedures for Handling Asbestos-Containing Material**

5.6.2.1 **GTAA-Controlled Areas**

1. Asbestos Containing Material is still known to be present in certain *Buildings* at the *Airport*.

2. All proposed *Construction* shall be reviewed by *GTAA Environmental Services* for the possibility of asbestos disturbance in *Buildings* where it is known to be present.

3. Before starting any asbestos abatement activities, the *Contractor* shall submit to the *CCPO* a schedule and *Work* plan detailing all such *Work*.
Care must be taken to ensure that unprotected exposure to asbestos is always avoided by persons and disturbances prevented by following procedures set out within the relevant requirements of the Applicable Codes and Standards, including:

b. Ontario Regulation 347 General - Waste Management under the *Ontario Environmental Protection Act*,
c. Ontario Regulation 490/09 Designated Substance – Asbestos, under the *Occupational Health and Safety Act*.
d. Ontario Regulations 278/05, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations.
e. The GTAA Asbestos Management and Control Program is available upon request from the GTAA *Environmental Services*.

Failure to follow and achieve the requirements of the above procedures may result in the shutdown of the *Work*, and eviction of the responsible *Person(s)* from the *Airport*.

### 5.6.2.2 Other Airport Areas

1. Other *Buildings* that are not operated or maintained by the GTAA may contain asbestos. The *Tenant* is responsible for conducting asbestos condition surveys to identify (if any) both the locations and condition of the asbestos-containing material prior to starting any construction, to notify and make known to the *Contractor* of such, and to confirm that the *Contractor’s* asbestos management program is in place.

2. *GTAA Environmental Services* shall monitor all asbestos abatement activities by the *Contractor* for adherence to the requirements of the Asbestos Management and Control Program where such activity is part of a *FAP*.

### 5.6.2.3 Asbestos Incident Response Procedure

1. Incidents involving the release, or the potential release of asbestos fibres must be reported immediately to the *Airport Operations Centre (AOC)*.

2. Detailed procedures for asbestos emergency response and entering areas containing asbestos are set forth in the *Ontario Occupational Health and Safety Act*.

### 5.6.2.4 Management of Polychlorinated Biphenyls

1. A *Tenant* who possesses or who has in its *Building Space* or *Land Parcel*, material containing polychlorinated biphenyls (PCBs) in a form as described by the *Canadian Environmental Protection Act (CEPA)* shall immediately notify the GTAA *Environmental Services*.

2. The *Tenant* shall notify its *Contractor(s)* of the existence of PCBs before *Construction* in the area(s) of the site that contains such material is started.
3 The Tenant shall then prepare and submit to GTAA Environmental Services a PCB Management and Emergency Response Plan. This plan shall contain the following information concerning the PCB material itself:
   a. volume/weight,
   b. concentration,
   c. form of material (solid or liquid),
   d. where the material can be found,
   e. how the company proposes to manage the material in terms of assessing its condition annually, and
   f. the proposed response procedures for cleanup and control of spills.

4 Storage of PCB material by the Contractor shall comply with CEPA, Storage of PCB Material Regulations.

5 Decommissioning and transportation of PCB equipment and/or waste by the Contractor shall comply with relevant requirements of the Applicable Codes and Standards, including:
   a. Transportation of Dangerous Goods Act,
   b. Ontario Regulation 347 General - Waste Management under the Ontario Environmental Protection Act,
   c. Ontario Regulation 362 Waste Management – PCB’s, under the Ontario Environmental Protection Act.

6 No new Construction shall specify or contain PCBs of any kind.

5.6.3 Temporary Storage of Hazardous Materials during Construction

5.6.3.1 Application

1 Temporary storage of hazardous materials during Construction shall be performed in compliance with the policies, guidelines, and Applicable Codes and Standards specified herein.

2 Such hazardous materials can include, but are not limited to, fuel, hydraulic oil, paint and solvents.

3 Such materials shall be safely and properly stored using purpose-made CSA and ULC listed containers clearly labelled and stored in lockable cabinets.

4 The Contractor as a best management practice shall provide spill containment for the duration of the Construction.

5 Disposal of hazardous materials on the Construction site shall be performed by the Contractor in compliance with the applicable guidelines and regulations including those specified herein. Detailed records of disposal must be kept by the Contractor and provided to GTAA Environmental Services upon request.
5.6.3.2 Regulatory Compliance

1. Temporary storage of hazardous materials on the Construction site shall conform to all Applicable Codes and Standards, including:
   b. The National Fire Code, 2010
   c. Ontario Regulation 347 General - Waste Management, under the Ontario Environmental Protection Act,
   d. Ontario Ministry of the Environment (MOE) - Guideline for Environmental Protection Measures at Chemical Storage Facilities.

5.6.4 Mould Prevention and Remediation during Construction

5.6.4.1 Application

1. The Contractor shall make every effort to prevent the growth of mould during Construction and should develop a material moisture management plan.

2. The Contractor shall provide all temporary heat and/or ventilation, as well as all temporary enclosures necessary to prevent moisture intrusion and build-up in areas where potential mould-growth surfaces are present.

3. The Contractor shall prevent any organic refuse material from being left in wall cavities or other concealed spaces.

4. Where materials are found to exhibit mould growth, and such growth cannot be arrested under the remediation guidelines listed herein, such material shall be removed and replaced at the expense of the Contractor in strict accordance with the relevant requirements of the Applicable Codes and Standards.

5. If mould is discovered within a Project area, Work must stop, the area isolated, and GTAA Environmental Services must be immediately notified.

5.6.4.2 Regulatory Compliance

1. Prevention, control and remediation of mould by the Contractor on the Construction site shall conform to the relevant requirements of the Applicable Codes and Standards including:
   d. GTAA Moisture Management Plan.
5.7 Environmental Emergency Response Plan

5.7.1 Compliance Requirements

1. An Environmental Emergency Response Plan shall be developed by the Contractor performing construction acceptable to the GTAA Environmental Services, to cover all potential environmental emergencies that may occur at the Place of Work.

2. The Environmental Emergency Response Plan shall consist of a predetermined sequence of communication and action plans, which can be implemented quickly, to contend with various types of environmental emergencies at the Airport. The plan shall also describe clean up and disposal procedures by the Contractor for all types of environmental spills.

3. The Environmental Emergency Response Plan shall be developed to contend with spills of hazardous materials described in Section 5.6. The plan shall be developed following the Environmental Protection Act, the Transportation of Dangerous Goods Act and the Hazardous Products Act, the GTAA Incident Management System (IMS), and the GTAA Environmental Emergency Contingency Plan.

4. Fuel spills involving aircraft fuel shall be dealt with in accordance with the requirements of CAN/CSA B836 – Storage Handling and Dispensing of Aviation Fuel at Aerodromes, and NFPA 407 – Standard for Aircraft Fuel Servicing.

5.7.2 Hazardous Material Spill—Control/Containment/Clean up

1. In the event of a fuel or hazardous spill/accident, GTAA Fire and Emergency Services (F&ES) shall have overall command of the incident. F&ES has primary responsibility for identifying the spilled material and for determining its relative danger. Person(s) encountering a spill of hazardous material must notify the Airport Operations Centre (AOC) immediately upon discovery.

2. It is the responsibility of the Person(s) responsible for the spill to remove the material and to repair any damage, at their expense.

3. Where F&ES determines that it is most expedient, the GTAA will clean up the spill, remove the material and repair any damage. The costs of such clean up and repair will be charged to the Person(s) responsible for the spill.

5.7.3 Disposal of Material

1. Following a spill event, all material in contact with the hazardous substance shall be considered hazardous. The requirements for the proper disposal of materials are described in Ontario Regulation 347 General - Waste Management.
5.8 Chemical Storage and Distribution

5.8.1 Upgrading and Installing New Storage Tanks
1 Petroleum products and allied petroleum products can be found in older underground storage tank systems, above ground storage tank systems and fuel distribution systems located on Airport Lands.

5.8.2 Regulatory Compliance
1 All tanks installed and their operation on the Airport must meet the requirements of the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations SOR 2008-197.
2 Details of all tanks installed on Airport Lands shall be provided to the GTAA Environmental Services confirming registration of the tank with Environment Canada.
3 GTAA Environmental Services shall monitor the installation, removal and operation of all storage tanks where they are part of a Facility Alteration Permit (FAP). If removal of an underground tank or system results in the discovery of contaminated soil, GTAA Environmental Services must be contacted immediately. A reputable, qualified environmental consultant will be required to properly delineate the extent of contamination and the affected soil removed to an off-site licensed facility. All records of sampling and disposal must be provided to GTAA Environmental Services upon request.

5.8.3 Fuelling Practices
1 To minimize the amount of contamination generated from fuelling operations during Construction, the following provisions shall be implemented by the Contractor:
   a. All fixtures, hoses, nozzles and storage tanks shall be in good repair with no leaks, and
   b. Refilling operations and storage tanks shall not be located within 30 m of a waterway.

5.9 Management of Contaminated Soils

5.9.1 Soil Disturbance and Excavation
This section covers Construction involving the investigation and remediation of hydrocarbon and/or glycol contaminated soils, the use of contaminated excavation material, and the requirements for using clean fill.

5.9.2 Regulatory Compliance
1 Soil contaminated with glycol and/or hydrocarbons shall not be used in other Projects (either on or off the Airport Lands), stockpiled within 30 m of any
watercourse, nor buried below any other material. Where soil contaminated with glycol and/or hydrocarbons is discovered during Construction, the Contractor shall contact GTAA Environmental Services immediately for instructions on how and where to dispose of such contaminated soil.

2 Soil contaminated by anything other than glycol and/or hydrocarbons shall be treated in accordance with the relevant requirements of the applicable guidelines and regulations for storage or disposal off-site.

3 All site investigations and remediation as part of the Construction shall be conducted in accordance with the relevant requirements of the Applicable Codes and Standards, including:

a. CCME Recommended Canadian Soil Quality Guidelines,

b. CCME Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites - Volume I; Main Report and Volume II; Analytical Method Summaries,

c. CCME Subsurface Assessment Handbook for Contaminated Sites, and

5.9.3 Fill Requirements

1 Only clean, non-contaminated fill shall be used for Construction on the Airport Lands. Prior to its import for use, certification of fill quality by a laboratory analysis and a qualified consultant’s report shall be submitted to the GTAA Environmental Services detailing source and sampling program, and estimated quantities of fill material.

5.10 Air Quality

5.10.1 GTAA Policy

1 To reduce air emissions of contaminants from activities at the Airport, the GTAA has adopted measures that will increase compliance with local requirements and improve air quality at the Airport and in the surrounding area.

2 The GTAA has adopted a Low Emission Policy for the Terminals.

5.10.2 Regulatory Compliance

1 All air emissions shall comply with federal and provincial legislation respecting air quality. Notwithstanding Sentences (2) and (3) following, the Contractor shall be solely responsible for determining the nature and applicability of any such legislation in the choice of measures and methods used in the Construction.

2 The Canadian Environmental Protection Act (CEPA) sets out desirable, acceptable and tolerable air quality objectives for most of the air pollutants found in the vicinity of airports.
The Ontario Environmental Protection Act (EPA) also describes requirements for air quality. The EPA describes the requirements for a Certificate of Approval for air emissions from sources listed within the Act.

5.10.3 Ozone-Depleting Substances

5.10.3.1 Definition

Ozone-Depleting Substances (ODS) are chemical substances that deplete the ozone layer found in the earth’s upper atmosphere. The depletion of the ozone layer results in higher levels of harmful solar radiation reaching the earth’s surface.

5.10.3.2 Regulatory Compliance

1. The Contractor shall comply with all federal and provincial legislation respecting Ozone-Depleting Substances.

2. The Contractor shall comply fully with the Federal Halocarbon Regulations under the Canadian Environmental Protection Act that control the import, manufacture and export of ODS, and controls the end use of halocarbons.

3. The Contractor shall comply with the GTAA Halocarbon Release Reporting Procedures.

4. The Contractor shall comply with the Ontario Environmental Protection Act to address the recovery and disposal of ODS.

5. Construction involving moving, replacing, adding, repairing or decommissioning equipment containing ODS shall comply with the Ozone Depleting Substances – General Regulations, and the Refrigerants Regulations.

6. Contractors performing demolition operations at the Airport must obtain from provincial authorities having jurisdiction and/or certified disposal agencies certification for the proper decommissioning and disposal of existing air-conditioning units, and/or other CFC-containing equipment that is removed from Airport Lands.

5.10.4 Dust Control

1. The Contractor shall control dust generated by Construction activities so as to prevent soil loss, reduced visibility and to prevent the presence of potentially harmful airborne substances. The use of water is preferred by the GTAA as a dust control measure.

2. The Contractor shall be responsible for providing watering equipment and/or other dust control measures to the acceptable to the GTAA during Construction and shall always maintain all such equipment and measures on site during Construction. The use of chlorides is strictly prohibited in Airside Areas. Water is the only measure allowed for dust control in Airside Areas.

3. The GTAA has several designated hydrants specifically equipped to load water trucks at the Contractor’s expense for dust control purposes. Instructions for
obtaining a Fire Hydrant Permit, and for use and operation of GTAA fire hydrants may be found in the publication GTAA Fire Hydrants – Standard Operating Procedures 003 – Facilities.

4 Contractors may obtain a Fire Hydrant Permit by completing a GTAA Fire Hydrant Approval Form and submitting it to the Maintenance Planning department of the GTAA Facilities Department not later than three business days prior to the required date.

5 Should the Contractor fail to control dust emissions, the GTAA reserves the right to order the Contractor to cease all operations at the Contractor’s expense and risk until adequate measures have been taken.

5.10.5 Indoor Air Quality

5.10.5.1 Dust Control

1 The Contractor shall be aware of the release points and the control measures in effect and shall be required to submit a dust management plan which shall identify all sources of dust generated by the Construction operation and describe dust control measures to be taken for all sources.

2 The Contractor shall conduct regular inspection and maintenance of indoor air quality measures with respect to dust including ventilation system protection and ventilation rate. Detailed records of inspection and maintenance shall be provided to GTAA Environmental Services upon request.

3 More details can be provided by contacting GTAA Environmental Services.

5.10.5.2 Odour Management

1 The Contractor shall develop and implement an odour management plan to prevent residual problems with odours in the completed Building and protect workers and adjacent Tenants on the site from undue health risks during Construction. The plan should identify measures to:

   a. Address problem substances, including chemical fumes, off-gassing materials and moisture.

   b. Ensure that these problems are not introduced during Construction, or, if they must be, eliminate or reduce their impact.

   c. Areas of planning, including:

      i. ventilation;
      ii. product substitutions and materials storage;
      iii. safe and proper installation methods of products;
      iv. regular monitoring for volatile organic compounds;
      v. safe and thorough clean-up for chemical spills; and
      vi. conduct regular inspection and maintenance of indoor air quality measures including ventilation system protection and ventilation rate.
2 Some *Construction* activities can release large amounts of Volatile Organic Compounds (VOCs) into the *Building*. Temporary ventilation systems should be installed to quickly remove the gases.

3 Ventilation is generally needed when "wet" building materials are in use, when using materials that give off an odor, or when using materials that carry a manufacturer's warning regarding the need for ventilation.

4 Ventilation should continue for a minimum of 24 hours after completion, or until there is no longer any noticeable odors. Consider a building flush out at the end of the *Construction* process and before occupancy.

5 More details can be provided by contacting *GTAA Environmental Services*.

5.10.5.3 *Noise*

1 The *Contractor* shall take all measures reasonably necessary in the circumstances to protect workers, the public and adjacent *Tenants* from exposure to disruptive sound levels.

2 The protective measures shall include the provision and use of engineering controls, work practices and, hearing protection devices.

3 More details can be provided by contacting *GTAA Environmental Services*.

### 5.11 Equipment Maintenance

5.11.1 *Restriction*

1 During *Construction*, equipment may require maintenance and repair (i.e. changing oil on bulldozers, excavators and other motorized equipment). Such maintenance and repairs are only permitted on the *Airport Lands*, with prior notification to and approval by the *GTAA Project Manager*.

5.11.2 *Precautions*

1 Where heavy civil equipment is brought onto *Airport Lands* that could possibly leak fuel or oil, the *Contractor* shall take the following special precautions:

   a. Designate an area on the *Construction* site where all equipment will be stored when not in use or to conduct maintenance and repairs. Such area must not be closer than 30 m from a watercourse.

   b. Locate and grade the area so that surface runoff will not flow out of the area.

   c. Provide the area with enclosed containers for the disposal of all refuse and non-hazardous waste resulting from the equipment maintenance.

   d. Provide the area with a spill control kit for prompt clean up of hazardous materials spills.
c. Post instructions at the site outlining spill response procedures, and names and phone numbers of persons and agencies to be contacted, including the Airport Operations Centre (AOC).

## 5.12 Wildlife Control

### 5.12.1 Prevention Policy

1. The GTAA regards wildlife on the Airport Lands as a potential hazard to Airport operations and aircraft safety.
2. It is the policy of the GTAA to design, construct, maintain, and operate the Airport and its facilities in a manner that will minimize these hazards.
3. To rid the Airport of wildlife attractants, it is necessary to use effective wildlife management, taking into consideration wildlife feeding, nesting and cover requirements as an aspect of good Project design.
4. The application of proper design and Construction methods at the Airport can remove or limit the attractiveness of such Structures and environments for wildlife. Refer to Article 4.6.1.2 for additional design requirements.

### 5.12.2 Regulatory Compliance

1. All design and Construction, related to planting of vegetation, vegetative manipulation and wildlife control shall be in accordance with the relevant requirements of the Applicable Codes and Standards, including:
   a. Canadian Aviation Regulations; Part III, Subpart 2—Airport Wildlife Planning and Management,
   b. Toronto Pearson International Airport Zoning Regulations,
   c. TP 11500—Wildlife Control Procedures Manual,
   d. TP 13459—Sharing the Skies: An Aviation Industry Guide to the Management of Wildlife Hazards, and
   e. Ontario Fish and Wildlife Conservation Act.

### 5.12.3 Contractor’s Responsibilities

1. All Construction sites shall be kept clean and clear at all times of all organic garbage, piles of cleared vegetation, wood and fibrous materials, standing water or any source of food that may attract wildlife. Where standing water cannot be avoided due to Construction site topography, pumps shall be deployed by the Contractor to remove such water.

## 5.13 Relics and Antiquities

1. A Contractor who discovers any relics, antiquities, and/or other items of historical, archaeological or scientific interest, such as cornerstones, commemorative plaques, inscribed tablets and other similar objects during Construction, shall stop any Work
near the item and immediately notify the GTAA Project Manager, GTAA Environmental Services and the CCPO of the discovery.

2 Until a visual inspection and removal arrangements for further investigation and evaluation by the appropriate expert have been completed and written permission to proceed has been given by the same to the GTAA Environmental Services, the Contractor shall not recommence Work at the discovery area.

3 The GTAA shall be responsible for arranging and paying for any expert persons for services described in Sentence (2) above.

4 All such items described in Sentence (1) above shall, upon discovery, become the property of the GTAA until proper disposition of the item can be ascertained. The Contractor shall not remove any items from, nor further disturb the discovery site. Failure to comply will result in the GTAA reporting the Contractor to the appropriate authorities, and the immediate removal of the Contractor from the Place of Work.

5.14 Climate Change Adaptation Policy

Consultants must be aware of the anticipated changes to the climate in the Greater Toronto Area and include appropriate adaptive features within the Project.

5.15 Low Impact Development Policy

Project Initiators are encouraged to consider low impact development as a storm water management strategy to mitigate the impacts of increased runoff by managing runoff more appropriately as close to the source as possible. A Low Impact Development Storm Water Management Planning and Design Guide is available from the Credit Valley Conservation Authority.

5.16 Soil Import/Export Requirements

1 No soil (topsoil/fill material) is to be imported to Airport Lands without approval from GTAA Environmental Services. To make a determination on soil import, GTAA Environmental Services will require a qualified consultant’s report outlining the following:

   a. Source of the soil, including previous land uses which would be used to develop an appropriate sampling program to characterize the material being brought on to Airport Lands.

   b. Environmental sampling program appropriate to the quantity of material being brought on to Airport Lands.

   c. Comparison of the environmental sampling results to appropriate federal/provincial guidelines.

   d. Interpretation of the sampling results.

   e. Recommendation of soil for acceptance for proposed use based on environmental sampling and geotechnical sampling.
2 Soil exported from Airport Lands must be accompanied by a qualified consultant’s report on an appropriately designed program to characterize the material and quantity being exported and recommended land uses. Soil exported from Airport Lands must be documented and include a letter from the receiver accepting the material at the receiver’s site.
6.1 Scope

1 In accordance with Canadian Aviation Security Regulations, 2012, regulatory requirements and GTAA policies, all Persons engaged in Construction at the Airport shall adhere to all security and access control procedures and requirements of this Part. Security procedures may be amended from time to time for a Construction site due to changing security concerns and operations with the Airport and aviation industry.

2 The GTAA Corporate Safety and Security Department shall be notified in advance of all Projects start dates and if a Person may require a Restricted Area Identity Card (RAIC), Temporary Security Control Pass, vehicle pass, security escort, key cards and/or security keys.

3 It is the responsibility of all Contractors and Consultants requiring access to the Restricted Area or an area in the Restricted Area designated as a Critical Area for design and/or Construction purposes to make application for, and obtain all required passes, permits and other documentation through the GTAA Pass Permit Control Office prior to commencing the activity.

4 It is the responsibility of all Contractors and Consultants requiring access to the Restricted Area or an area in the Restricted Area designated as a Critical Area for design and/or Construction purposes to ensure that all employees understand the security requirements at the Airport.

6.2 Accessing the Restricted Area

1 Authorized access to the Restricted Area or an area in the Restricted Area designated as a Critical Area may be granted by the GTAA on a need and right of entry basis as determined by the GTAA.
2 Entry into the Restricted Area without a need (Work related duties) and right (possession of a valid Restricted Area Identity Card (RAIC), Temporary Construction Pass or Temporary Security Control Pass) is strictly prohibited.

3 To access the Restricted Area to perform Work related duties, a RAIC, Temporary Security Control Pass or, Temporary Construction Pass is required.

4 RAICs, Temporary Security Control Passes or, Temporary Construction Restricted Area Passes must always be clearly displayed within the Restricted Area.

### 6.3 Airport Restricted Area Access Clearance Program

#### 6.3.1 Accessing the Critical Area

1 The Critical Area is an area within the Restricted Area of the Airport designated as critical. It comprises of the commercial aprons at the Terminals. Access to the Critical Area is bordered by Non-Passenger Screening Vehicle (NPSv) locations.

2 To access the Critical Area for performing Work related duties, a RAIC, Temporary Security Control Pass, or Temporary Construction Pass is required.

3 All Persons in a vehicle must be verified by an access control guard at a Non-Passenger Screening Vehicle (NPSv) location.

4 If selected for screening, all Persons must submit to the screening process of their person, personal items in their possession, and the vehicle they are travelling in.

5 RAIC holder(s) that are escorting Temporary Security Pass holder(s) and/or Temporary Construction Pass holder(s) are required under the Canadian Aviation Security Regulations to present the Temporary Security Pass holder(s) and Temporary Construction Pass holder(s) for screening prior to entering the Critical Area. Temporary Security Pass holder(s) and Temporary Construction Pass holder(s) are not permitted to enter the Critical Area unless they have been presented to CATSA for screening.

6 Entry into the Critical Area without a need (Work related duties) and right (possession of a valid Restricted Area Identity Pass, Temporary Security Control Pass or Temporary Construction Pass) is strictly prohibited.

7 RAICs, Temporary Security Control Passes or Temporary Construction Passes must always be displayed and visible within the Critical Area.

#### 6.3.2 License to Operate

1 In general, a Person(s) who is not currently under Contract to the GTAA (either directly or indirectly via subcontract) is required to obtain a License to Operate. An application and additional information can be obtained by visiting:

2 The application contains a Certificate of Insurance that is to be completed along with the application for the License to Operate. Contractor insurance policies are reviewed and approved by the GTAA Corporate Risk and Finance Department.

3 An administration fee will be charged by the GTAA for the issuance of a new License to Operate, as well as subsequent license renewals. A License to Operate is generally issued for the term of the Contract.

4 Processing time for a License to Operate may vary from approximately 2 to 10 working days, or longer, depending on the completeness of information provided on the application.

5 A Contractor directly engaged by a Tenant or a subcontractor to the Tenant’s Contractor requiring a RAIC, Temporary Security Pass or Temporary Construction Pass must first obtain a License to Operate.

6.3.3 Establishing a New Employer Account with GTAA Pass Control Office

1 New employers at the Airport may establish an account for specific employees to access Restricted Areas by submitting their requirements for review and approval to the GTAA Pass Permit Control Office. If approved, an account will be set up and employees may apply for a Transportation Security Clearance, Restricted Area Identity Card (RAIC), Temporary Security Control Pass, Temporary Construction Pass, Keycard, Airside Vehicle Operators Permit (AVOP), and Vehicle Markers. For additional information, or to apply, please visit: https://www.torontopearson.com/en/operators-at-pearson/permits/employee-passes.

PLEASE NOTE: A License to Operate/Contract with the GTAA is a pre-requisite to establishing an account at the GTAA Pass Control Office.

6.3.4 Restricted Area Identity Card (RAIC) Application Procedures

1 The following procedures shall be undertaken by applicants to obtain a Restricted Area Identity Card (RAIC):
   a. Complete the Airport Security Awareness Training.
   b. Fill out the Transportation Security Clearance (TCS) form.
   c. Attend at the GTAA Pass Permit Control Office to submit the completed Transportation Security Clearance (TCS) form.

2 RAIC applicants may at this time be issued a Temporary Security Control Pass which will be valid for three months.

3 A holder of a Temporary Security Control Pass must always be under the escort of a valid RAIC holder while within the Restricted Area and abide by the security control requirements described at the time of issuing the Temporary Security Control Pass. The Temporary Security Control Pass holder must be screened at a Pre-board screening point prior to entering the Restricted Area and at a Non-Passenger Screening Vehicle (NPSv) point prior to entering the Critical Area.
The GTAA Pass Permit Control Office will submit the completed application for Transportation Security Clearance to Transport Canada for review.

a. Once the Transportation Security Clearance has been granted by Transport Canada the employee may apply for a Restricted Area Identity Card (RAIC).

Please visit: https://www.torontopearson.com/en/airport-employees/passes-and-permits/permit-office for applications and detailed information on the above steps.

Please Note: This process can be quite lengthy. Plan ahead to avoid Project delays.

If a RAIC is lost, misplaced or stolen it must be immediately reported to the RAIC holder’s employer and the GTAA Pass Permit Control Office pass.permits@gtaa.com and the RAIC holder shall pay the applicable replacement fee to the GTAA Pass Permit Control Office.


### 6.3.5 Obtaining a Temporary Construction Pass

1. A Construction employee who does not have a RAIC is required to contact the GTAA Project Manager in charge of the Project to be issued a GTAA Temporary Construction Pass.

2. The Contractor must have a signing authority to receive Temporary Construction Passes from the GTAA Pass Permits Control Office otherwise the Contractor must contact the GTAA Officer, Construction Security Planning to receive such Temporary Construction Passes.

3. The Temporary Construction Pass allows a Construction employee access to the Restricted Areas and must be escorted at all times by a GTAA approved security guard while in the Restricted Area.


5. Screening of Temporary Construction Pass holders is mandatory at non-passenger screening points (NPS) prior to entering the Restricted Area and at non-passenger screening vehicle (NPSv) points prior to entering the Critical Area.

### 6.4 Security Keys and Key Cards

#### 6.4.1 Key Types and Issuance Requirements

1. Security Keys/Key Cards—Access to Restricted Areas
   a. Persons requiring security keys must first possess a valid RAIC.
   b. Security keys may be issued for more than one day and must be signed in and out within the duration allowed.
c. *Contractors* must submit the required information to the *GTAA Pass Permit Control Office* as to what *Place(s) of Work* they need access to, for what purpose, and for how long.


2 Security Keys—Access to GTAA-managed asset areas (communications, mechanical, electrical rooms, etc.):

a. *Contractors* must submit the required information to the *GTAA Pass Permit Control Office* as to what *Place(s) of Work* they need access to, for what purpose, and for how long.

b. Security keys are issued on a daily basis and must be signed in and out within the duration allowed.

c. Permission to access rooms must be made in advance to the owners of such rooms.

3 Keys—Access to GTAA-managed areas (offices, etc.).

a. *Contractors* must submit the required information to the *GTAA Pass Permit Control Office* as to what *Place(s) of Work* they need access to, for what purpose, and for how long.

b. Keys are issued on a daily basis and must be signed in and out within the duration allowed.

c. Keys are issued by the Access Control Specialist under the authority of the GTAA Corporate Safety and Security Department.

4 Keys—Access to Tenant-managed areas.

a. Keys are issued on an as-needed basis and must be signed in and out by the *Tenant* for the approved duration.

b. Keys are issued by and under the authority of the *Tenant*.

6.4.2 Issuing Procedures

1 To obtain security keys permitting the holder access to the *Restricted Area*, the following documentation shall be sent to the GTAA Corporate Safety and Security Department, who is responsible for approval of keys and authorizing the GTAA Access Control Specialist to process and issue key(s) and/or key cards:

a. Written verification from *Contractors* of contractual relationship, nature of service provided, duration of *Contract* and verification that the *Contractor* has a specific justifiable requirement to obtain specific security keys and/or key cards to access the *Restricted Area* during the *Contract*.

b. A formal written request from the *Contractor* identifying the types and numbers of security keys required with appropriate justification for the same. Attached to the letter shall be a copy of the *Contractor’s* liability insurance certificate.
Upon approval of a security key request, a representative of the Contractor shall formally sign for receipt of security keys at the designated pick up point and acknowledge agreement to the terms and conditions of issuance for such security keys.

The GTAA Corporate Safety and Security Department routinely monitors the issuance of security keys and/or key cards to ensure compliance with all terms and conditions of issuance and will conduct audits on an ad hoc basis to account for the possession of issued security keys.

### 6.4.3 Contractor’s Responsibilities

1. The Contractor is responsible for the control, storage, issuance, recovery and return of all security keys and/or key cards obtained and shall further ensure that such security keys and/or key cards are never duplicated.

2. Security keys and/or key cards are issued for the Contractor’s sole use and shall not be loaned to any other Person(s). Keys and/or key cards shall be properly secured in a safe place during non-working hours.

3. All security key holders and/or key card holders are responsible for safeguarding keys and/or key card holders while in their possession. Security keys and/or key cards will be signed in and out for the indicated duration of the Work and will be accounted for using a Key Sign-out Form. Security keys issued for more than one day at a time must be secured on site in a safe place during non-working hours, and not removed from the Airport.

4. If a security key and/or key card is stolen, lost or misplaced it must be immediately reported to the GTAA Corporate Safety and Security Department and the Contractor shall pay the costs associated with the replacement of such security keys and/or key cards or re-programming of all affected locks.

### 6.5 Vehicle Passes

#### 6.5.1 Types

1. A “Restricted Area Vehicle Pass - Vehicle Marker” is a temporary marker issued by the GTAA which authorizes designated vehicles access to the Restricted Area on a need and right-of-entry basis.

2. A “Permanent Vehicle Marker” is permanently affixed to a vehicle which has a continuous or frequent need to access the Restricted Area.

3. For vehicle pass requirements refer to Section 8.2 of this Code or directly to Toronto Pearson AVOP web page [www.torontopearson.com/en/airport-employees/passes-and-permits/airside-vehicle-operators-permits](http://www.torontopearson.com/en/airport-employees/passes-and-permits/airside-vehicle-operators-permits) for more detailed information regarding vehicle markers and insurance requirements. Airport Traffic Directives "AVOP Requirements and Administration".

#### 6.5.2 Vehicle Marker Approval Process

1. For vehicle marker approval, written application shall be made to the GTAA Pass Permit Control Office by the Person applying on company letterhead stating the following:
b. details as to why vehicle access is required to enter *Restricted Areas*.
c. proof of D or DA certification for employee(s). If requesting Temporary Vehicle Plates, the names of escorting agency/drivers shall be provided.

Upon approval:

a. The *Person* or a representative of the *Person(s)* applying for vehicle passes shall be designated as “signing authority” in charge of authorizing vehicle markers and shall register as such with the GTAA Pass Permit Control Office.

b. Vehicle Marker/Plate certificates shall be issued.

### 6.6 Return of Security Items

1. Immediately following completion of the *Work* or when directed by the GTAA, the *Contractor* shall return all RAIC’s, *Temporary Security Control Passes*, *Temporary Construction Passes*, key cards, security keys and vehicle markers issued for the performance of the *Work to the GTAA* Pass Permit Control Office.

2. Failure to comply with the above will result in the GTAA invoking its right to deny the issuance of RAICs, *Temporary Security Control Passes*, *Temporary Construction Passes*, key cards, security keys and vehicle markers privileges for future *Contracts* with such *Contractors*, in addition to the costs identified below.

3. RAICs, *Temporary Security Control Passes*, *Temporary Construction Passes*, key cards, security keys and vehicle markers not returned to the GTAA upon termination of a *Contract* will result in applicable fees payable to the GTAA by the *Person(s)* to which the items were issued, in addition to all costs associated with re-keying/re-programming of all affected locks. Specific details can be found on-line [https://www.torontopearson.com/en/airport-employees/passes-and-permits/permit-office](https://www.torontopearson.com/en/airport-employees/passes-and-permits/permit-office).

### 6.7 Security Escort

1. The *Contractor* is responsible for providing valid RAIC holders to perform escort duties within the *Restricted Area* for employees who do not have a valid RAIC. A holder of a valid RAIC may escort a maximum of 10 people holding *Temporary Security Control Passes or Temporary Construction Passes* in the *Restricted Area*. Prior to the performance of escort duties, *Contractor* shall confirm escort ratios are not exceeded.

2. Valid RAIC holders may provide surveillance in the *Restricted Area* for a maximum of 20 people holding *Temporary Security Control Passes or Temporary Construction Passes*, provided they are all confined to a well-defined area and are always visible to the escort.

3. Surveillance in the *Restricted Area* may be provided for more than 20 persons holding *Temporary Security Control Passes or Temporary Construction Passes*, provided they are all working within an area confined by physical or personal barriers. All entrances to and
exits from such an area must be controlled by surveillance personnel at all times. Where portions of such an area cannot be confined by physical barriers, surveillance personnel shall be provided as a substitution. The number and placement of such personnel shall be determined by the GTAA Corporate Safety and Security Department according to the specific requirements of each situation.

4 The Contractor may engage security escorts and/or personnel for surveillance, utilizing a GTAA-approved security guard company currently operating at the Airport. Contact the GTAA Corporate Safety and Security Department for a list of such companies. For non-GTAA Projects, the Contractor shall pay all costs associated with engaging such personnel.

6.8 Contractor’s Responsibility

1 The Contractor shall be responsible for compliance with all aspects of security requirements for their personnel. This includes obtaining security clearances, RAIC’s and Temporary Passes and providing personnel for performing escort duties for persons with Temporary Security Control Passes or Temporary Construction Passes.

2 The Contractor shall be fully responsible for all Construction personnel and vehicles within the Restricted Area.

3 The Contractor shall ensure that superintendents, foremen, flagmen and key personnel of subcontractors attend a briefing by the GTAA Corporate Safety and Security Department on site before the start of the Construction, regarding safety and security requirements.

4 The Contractor shall designate a single point of contact (SPOC) who shall be responsible for ensuring all aspects of security and operational safety requirements are adhered to, and who shall have authority to take immediate action to correct any non-conformance. Such Person(s) shall be available on a 24-hour “on-call” basis during Construction, and the Contractor shall post emergency contact information for such Person(s) at the Place of Work and provide such information to the Airport Construction Coordinator.

6.9 Security Barriers

1 The GTAA Corporate Safety and Security Department shall be given prior notification when it is necessary to remove security barriers to permit access to the Place of Work. Security barriers shall not be removed without prior authorization by the GTAA Project Manager and the GTAA Corporate Safety and Security Department.

2 Removal of security barriers or parts thereof without prior notice to the GTAA Corporate Safety and Security Department will result in the immediate confiscation and revocation of the RAIC, Temporary Security Control Pass or Temporary Construction Pass and any other passes and/or permits issued to the Person(s) responsible, and the immediate removal of such Person(s) from Airport Lands at the sole discretion of the GTAA.

3 Security barriers such as fences, gates, etc. must be used to prevent or deter access to the Restricted Area by unauthorized Persons.
4 A Place of Work within the Restricted Area must be enclosed with temporary hoarding and/or fencing to the satisfaction of the GTAA Corporate Safety and Security Department.

5 Airport Security Operations must be immediately informed by contacting 416-776-7381 if there is a possibility that the Restricted Area may be left unprotected at the end of a shift.

6 Failure to restore security barriers when required will result in their restoration by the GTAA, and all related costs shall be recovered from the Contractor.

6.10 Daily Security Duties by Contractors

1 The Contractor shall ensure that access points to the Restricted Area are secured when not in use and at the end of each working shift, to the satisfaction of the GTAA Project Manager and the GTAA Corporate Safety and Security Department.

2 During working hours, the Contractor shall ensure that access points to the Place of Work within the Restricted Area are controlled by measures acceptable to the GTAA Project Manager and the GTAA Corporate Safety and Security Department to prevent access by unauthorized Persons.

3 When Construction activities are to be carried out within the Restricted Area outside of normal working hours, the Contractor shall notify the GTAA Project Manager and the GTAA Corporate Safety and Security Department for authorization to access the Restricted Area and the time frame for performance of the Work required.

6.11 Security Measures

1 No less than 10 business days prior to the start of Construction the Contractor shall be responsible for establishing with the GTAA Project Manager and the GTAA Corporate Safety and Security Department the specific requirements to be in place for maintaining and ensuring security of the Place of Work at all times. Such proposed measures shall be reviewed and authorized in writing by the GTAA Corporate Safety and Security Department before the Contractor implements them.
Contractor Safety Requirements

7.1 Scope

1. This Part includes GTAA safety requirements and procedures applicable to Contractors while working within Airport Lands.

2. Notwithstanding all other requirements of the Applicable Codes and Standards, the specific requirements of this Code shall serve to ensure all Work proceeds in an orderly manner while maintaining maximum personal health and safety, and minimum disruption to Airport operations.

3. Potentially hazardous conditions inherent to the operations of an airport dictate that compliance with these requirements, as supplemented by any observations resulting in notification by the CCPO to Contractors, shall be considered mandatory and mitigated, controlled or ceased promptly.

4. Airport operations can be incidentally impacted and influenced by Construction that may occur in three distinct areas of the Airport: Airside, Groundside and Terminals.

5. Each area administers its own notification process prior to any Work commencing. Direct communication is available to Contractors by email and telephone.

6. As a requirement of an issued Facility Alteration Permit (FAP), the corresponding Activity Notice shall be authorized by the respective Groundside, Airside and/or Terminals coordination group with a copy submitted to the CCPO. The same notification process applies to both GTAA and Tenant initiated Projects.

7. For all contracted Work at the Airport, the Contractor shall communicate and coordinate its presence and activities directly with the Airport Operations Centre (AOC) by following the daily contractor notification procedure.

8. To ensure that execution of the Work causes the least possible interference or disruption to the Airport operations, Tenants, employees and the public as well as the normal use of premises, aircraft operating areas, roadways, parking areas, sidewalks or passageways, the Contractor may be required to perform the Work or portions thereof during off-hours or as prearranged with the Airport Construction Coordinator.
9 The GTAA or its designate shall monitor Contractors to verify that acceptable and reasonable standards of safety and health practices are being maintained.

10 The GTAA retains the services of an Independent Construction Safety Consultant (ICSC) to monitor the safety performance of Contractors performing Work at the Airport, further to Subsection (9) above.

11 It is the duty of the Contractor, the Contractor’s supervisor and every Person at the Place of Work and areas affected by the Work to follow proper procedures, to observe all regulations, government and otherwise, pertaining to the Work and to operate with the objective of occurrence-free performance.

12 The Contractor shall at all times ensure compliance with the respective applicable health and safety regulations and statutes and treat the same as minimum standards for the Work (refer to Subsection 4.1.4 of this Code).

13 The Contractor shall demonstrate an industry ‘best practices’ approach to health and safety at all times while at the Airport.

14 All Persons entering a Place of Work that is under the charge of a “Constructor” shall obtain approval from the “Constructor” and shall comply with the stipulated conduct and requirements of the “Constructor”.

7.2 GTAA Reporting Systems

7.2.1 Emergency Dispatch System

1 All accidents and emergencies must be reported through the Airport Operations Centre (AOC) for immediate dispatch of Airport medical, fire, and/or police assistance by calling (416) 776-3033. DO NOT CALL 911. An AOC operator is accessible 24 hours a day, 7 days per week including holidays. The caller must specify the location and nature of emergency, any personal injury, and their name and telephone number. The caller must remain on the phone and follow all instructions provided until advised otherwise.

2 Emergency number (416) 776-3033 must be conspicuously posted beside telephones and on Health and Safety Bulletin Boards in areas that may be utilized by Contractors for emergency reporting within the Place of Work. Emergency number (416) 776-3033 must be included in and communicated to workers during the Contractor induction process.

3 Each worker must receive a hardhat sticker with the Airport emergency reporting telephone number (416) 776-3033.

7.2.2 Reporting Unsafe Conditions

1 Contractors shall report to the Airport Operations Centre (AOC) any and all unsafe conditions and/or observed unsafe acts during Construction that may result in a fire or other type of incident causing property or Facility damage, damage to Building services, or have the potential to disrupt Airport operations, by calling 416-776-3055. An AOC operator is accessible 24 hours a day, 7 days per week including holidays.
2 Contractors shall report to the GTAA Project Manager or the Contract Administrator any unsafe conditions found within enclosed spaces such as ceiling spaces or behind walls during the course of the Work.

7.2.3 Reporting Incidents to AOC

1 Contractors shall establish and have in place clear plans and procedures for reporting and investigating incidents and near misses.

2 Contractors shall immediately report to the Airport Operations Centre (AOC) any and all incidents or accidents at the Place of Work that may or have resulted in property or Facility damage, damage to Building services, or have the potential to disrupt Airport operations, by calling 416-776-3055. An AOC operator is accessible 24 hours a day, 7 days per week including holidays.

7.2.4 Occurrence Investigation and Reporting to CCPO

1 The scene of an occurrence involving injury or loss of life of a Person(s) shall be secured and not be disturbed until the appropriate Authorities Having Jurisdiction give permission.

2 All occurrences at the Place of Work shall be investigated by the Contractor and reported in writing to the GTAA Project Manager and CCPO via their general email inbox, constructioncompliance@gtaa.com. The ICSC will review the report and may attend or assess the situation at its discretion and limitations.

3 The Contractor shall report all occurrences to the CCPO in the following timeframes:
   a. an immediate telephone call or emailed occurrence summary,
   b. any notices submitted to the appropriate Authority Having Jurisdiction, within the timeframe prescribed,
   c. any orders issued by an Authority Having Jurisdiction, as received, and
   d. a detailed occurrence investigation report and any other pertinent information or documentation regarding the causes of the occurrence within 48 hours of the occurrence. This report shall include a root cause analysis and appropriate corrective measures.

4 In the case of such an occurrence, the GTAA may at its discretion, conduct its own investigation, or oversee the Contractor’s investigation.

7.2.5 Occurrence Reporting to Project Manager or Contract Administrator

1 The Contractor shall report all occurrences to the GTAA Project Manager or the Contract Administrator via an immediate telephone call or emailed occurrence summary.
7.3 Emergency Response Planning

7.3.1 Emergency Plan

1 The Contractor must develop an Emergency Plan that addresses all potential emergency vulnerabilities, procedures for reporting, procedures for evacuation, communications, special assistance, training, gathering points and roll call.

2 The Contractor must ensure that all personnel, including subcontractor personnel, working on Airport Lands are instructed in and are familiar with the Emergency Plan.

3 The GTAA has developed an online ‘Facility Control Measures and Evacuation Plan’ training program. This is a two-part training program that reviews Airport Facility control measures and Building evacuation protocols for GTAA owned and operated Buildings. The training can be accessed using this link: www.gtaa.org/pearsonawareness/.

7.4 Contractor Health and Safety Submittals

7.4.1 General Requirements

1 All Contractors and Persons engaged in Construction at the Airport require an Ontario Ministry of Labour Registration of Constructors and Employers Engaged in Construction (Form 1000).

2 A Notice of Project (NOP) must be filed with the Ontario Ministry of Labour for all Construction regardless of Project value or duration. This is a mandatory requirement of the GTAA. A copy of the NOP must be provided to the CCPO. The Project number issued by the GTAA must be clearly listed on the NOP under the Description of Project section. Additionally, this section must include a clear description of the exact Place of Work on Airport Lands. The Contractor must amend its NOP if the project extends beyond its end date and copies of the amended NOP must be provided to the Ministry of Labour and the CCPO.

3 All Contractors with ongoing Projects with the GTAA shall submit an annual update of their Occupational Health and Safety Policy and Program to the CCPO.
7.4.2 GTAA Contractor Safety Pre-Qualification and COR™ Requirements

1. All Contractors working for the GTAA shall be prequalified under the GTAA Contractor Safety Pre-Qualification Process. The GTAA Contractor Safety Pre-Qualification Process guidelines and application form can be accessed using this link: www.torontopearson.com/en/operators-at-pearson/construction/before-you-start.

2. Safety pre-qualification applies to all Contracts entered into by or on behalf of the GTAA, and, at the discretion of the GTAA, may be applied to any airline, Tenant, or other Contractors whose Work is deemed by the GTAA to have the potential to impact sensitive Airport operational areas.

3. Effective January 1, 2018 to December 31, 2020

   All Contractors taking on the Project responsibilities of the “Constructor” for any GTAA Project greater than $5M will be required to be Certificate of Recognition (COR™) certified or can demonstrate active pursuit of certification by providing an IHSA issued “Letter of Intent” (LOI) in the interim.

   Effective January 1, 2021

   All Contractors taking on the Project responsibilities of the “Constructor” for any GTAA Project will be required to be Certificate of Recognition (COR™) certified demonstrated by the submission of their IHSA issued “Letter of Good Standing” (LOGS).

   By achieving COR™ Certification, the “Constructor” demonstrates that their health and safety management system has been developed, implemented, and will be evaluated on an annual basis through comprehensive internal and external audits and checks. For more detailed information about COR™ Certification, please visit the IHSA web page www.ihsa.ca/cor-home.

7.4.3 Submissions Required for Construction Projects

1. As a requirement of obtaining a Facility Alteration Permit (FAP) and prior to commencing the Work, each Contractor shall provide CCPO with a Project-Specific Safety Plan (PSSP) that integrates Construction specific risks and hazards and this Code’s requirements with the Contractor’s existing safety programs and procedures. The PSSP is subject to the review and comments of the ICSC and at a minimum shall include the following:
   a. Notice to Governing Authorities (Notice of Project),
   b. Ministry of Labour Form 1000 (including tiered contractors),
   c. Scope and areas of Construction Work,
   d. Risk Assessment (impact/interference with Airport operations),
   e. Hazard Assessment (potential and activity-based hazards),
   f. Project Personnel and Responsibilities (including tiered contractors),
   g. Training and Competency,
h. Communications (JHSC, Meetings, Postings, etc.),
i. Standards and Procedures,
j. Permits for Work,
k. Mobilization Plan,
l. Induction and Orientation,
m. Inspections (i.e. workplace, equipment, etc.), and
n. Emergency Plan.

The Contractor shall submit an electronic copy of the PSSP, which clearly identifies the Project description, Project number and any revision number.

2 Comments regarding the PSSP may be provided by the CCPO at its discretion.

3 The Contractor is required to provide updates of the PSSP based on phased Work and revisions based on changes in the scope of Work to the CCPO.

7.4.4 Pre-FAP Meeting

1 A meeting and/or Place of Work review may be requested at the discretion of the GTAA/ICSC to review health and safety submissions prior to the issuance of a FAP.

7.4.5 Roles and Responsibilities

7.4.5.1 GTAA Review

1 The ICSC monitors, at its discretion, all contracted Work at the Airport for compliance with all health and safety requirements on behalf of the CCPO and the GTAA.

2 The GTAA shall have the right to photograph, videotape, film, or otherwise document the progress of any contracted Work at any time and to use such documentation for its own purpose.

7.4.5.2 Contractors Responsibilities

1 The following responsibilities apply to the owners and managers of Contractors performing Work at the Airport:

a. promote workplace safety as a core value in keeping with the expectations of an operational Airport,
b. establish and maintain a written safety program and site-specific safety plans,
c. ensure all subcontractors have adequate safety programs and training,
d. include safety on the agenda of all meetings,
e. ensure competent supervisors have been appointed,
f. ensure adequate resources for safety and health are provided to all workers,
g. ensure adequate training for all workers has been provided, and
h. provide first aid facilities and trained personnel.

7.4.5.3 Health and Safety Performance

1 The Contractor is responsible for continuously evaluating and documenting safety performance. For GTAA Projects, the Contractor must provide copies of their monthly safety reports to the GTAA Project Manager or Contract Administrator detailing their health and safety performance for the preceding month for each Project. The report must be submitted during the first week of the succeeding month. For GTAA or Tenant Projects, the Contractor shall provide copies of their monthly safety reports to the CCPO upon request.

2 The monthly report must include:
   a. Total Injury Rate (TIR),
   b. Lost-Time Injuries (LTI),
   c. Non-Lost-Time Injuries (NLTI),
   d. Near Miss Incidents,
   e. Property Damage Incidents,
   f. Summary of Incidents and/or Injuries,
   g. Number of Workers (including subcontractors),
   h. Number of Supervisors (including subcontractors),
   i. Hours Worked by month and cumulative (including subcontractors),
   j. Number of Workplace Inspections;
   k. Number of orientations completed by month and cumulative:
   l. Number of safety meetings conducted by month and cumulative; and
   m. Number of hazard assessments conducted by month and cumulative.

7.4.5.4 Contractor Supervisor Responsibilities

1 The Contractor shall include as part of their safety program, detailed and Work-specific responsibilities for their “project supervisor” and other Persons acting in a supervisory capacity.

2 The Contractor shall provide the CCPO with a list of Project supervisors, relevant training and all contact information as part of the safety program submission.

7.4.5.5 Worker Responsibilities

1 The Contractor shall include as part of their safety program detailed and Work-specific responsibilities for their workers.

2 The Contractor shall include as part of their safety program a disciplinary and corrective action policy for all workers on their Project. This must include as a minimum, procedures for violation of high-risk activities, violence and harassment, intoxication and fitness for duty, and violations of this Code.
7.5 Contractor Safety Audit

7.5.1 Scope

7.5.1.1 Application

1 The GTAA is committed to ensuring that all Contractors provide a safe, secure and healthy workplace for every Person associated with the Construction, through the evaluation of Project-Specific Safety Plans (PSSP).

2 The CCPO observes Contractor safety performance through formal and informal Contractor safety audits. The purpose of these reviews is to motivate Contractors to attain a higher safety benchmark for conducting Work at the Airport.

7.5.1.2 Limitations

1 Contractor’s implementation of their PSSP and Work activities may be reviewed on a random basis based on factors such as Contract value, risk and/or duration. These evaluation reviews have been established to ensure compliance with this Code as part of a quality assurance system of the GTAA. These reviews in no way reduce, restrict, limit or in any way affect the autonomy of each Contractor’s responsibility as an “employer” or “Constructor” to ensure the Work is in compliance with legislative requirements and this Code.

2 These reviews may identify physical and procedural deficiencies that must be corrected by the Contractor to ensure compliance with legislative requirements and this Code prior to commencing the Work. Some components of the evaluations are based on construction industry “best practice”.

7.5.2 Procedures

7.5.2.1 Pre-FAP

1 During the pre-FAP meeting, the ICSC will discuss the process for Contractor safety audits during Construction. A copy of the documentation on which the safety audit will be based may also be provided to the Contractor during the safety audit.

7.5.2.2 Work in Progress

1 The ICSC will make random visits to the Place of Work, as warranted by the type of Work, to conduct reviews of the Work in progress.

2 Depending on the size and complexity of the scope of the Work, the ICSC may report findings of their reviews via email.

3 The ICSC may invite the Contractor’s site superintendent, safety representative, GTAA Project Manager or other Stakeholders to tour the Place of Work while making observations of Work in progress respecting health and safety practices and procedures.

4 The ICSC may request confirmation from the Contractor that noted deficiencies are acknowledged and are corrected immediately.
Where circumstances exist that may result in harm or damage, the ICSC may request immediate corrective actions prior to the continuation of the Work.

Where a formal review has been conducted, the Contractor Safety Audit report will be provided to the respective Contractor and to interested departments of the GTAA, where requested.

7.5.2.3 Completion Stage

1 At the completion of the Work, the Contractor may be evaluated based on their performance as it relates to the Contractor Safety Audits conducted.

### 7.6 Contractor Safety Standards

#### 7.6.1 Compliance Requirements

1 The Contractor’s Project Specific Safety Plan (PSSP) shall include policies and/or procedures that are amended to address the requirements of this Section.

2 When access or traffic control, special fire hazards, or other public safety issues arise as a result of contracted Work, the GTAA may require the presence of fire or police personnel, overtime operations and/or special equipment services. The Contractor shall make arrangements using the appropriate process and pay for such services directly or through the GTAA.

#### 7.6.2 Fire Safety

1 The Contractor’s Safety Plan shall address the requirements of this Section where the Work or Place of Work may include or affect:

   a. open flames,
   b. smoke,
   c. heat or sparks, not limited to welding, brazing, cutting, grinding, soldering, thawing pipe, torch applied roofing, etc.
   d. explosives,
   e. compressed gases,
   f. natural gas,
   g. flammable liquids,
   h. spray painting,
   i. temporary heat,
   j. temporary disabling of a life safety system,
   k. fire routes, fire hydrants, fire cabinets or extinguishers.

2 The Contractor shall conduct a hazard assessment and establish written procedures that include:

   a. Hot Work
   b. housekeeping/disposal,
   c. material storage,
   d. isolation of Work or Place of Work from occupants or general public,
   e. protection of equipment, plant or facilities,
f. fire extinguishing equipment and fire watch, and
g. emergency response.

7.6.2.1 *Hot Work*

1 The GTAA requires that the *Contractor* who has been issued a *FAP* for a *Project* has established their own *Hot Work Permit Process* and shall be fully responsible for all *Hot Work* activities carried out under the *Contractor’s* scope of *Work*.

2 The *Contractor* will issue all *Hot Work Permits (HWP)* required to complete the scope of *Work* (including sub-contracted *Work*). Each HWP issued by the *Contractor* must have an expiry date which cannot exceed 30 days from the date of issue at which time the HWP shall be reviewed and reissued as required.

3 By issuing a HWP, the *Contractor* must understand, incorporate, and maintain all applicable mitigating fire safety measures as detailed in the PSSP which forms part of the conditions for the issued FAP.

4 As a reference for the Contractors’ use, the CCPO has developed a sample *Hot Work Permit Checklist and Sign-off form* that can be used in the *Contractor’s* process or the *Contractor* can develop their own form, which must be equivalent or better for their use. Where the *Contractor* elects to use its own form, it must be submitted to the CCPO for review prior to it being used.

5 A “*Competent Person*” employed by the *Contractor* must review and assess each applicable site where *Hot Work* will be carried out and then fully complete, sign and post the HWP on site near the immediate location of the *Hot Work*.

6 The *Contractor’s* “*Competent Person*” must have fire extinguisher training and specific knowledge and understanding of:

   a. fire hazards and fire safety,
   b. requirements of the *National Fire Code*,
   c. requirements of this *Code*,
   d. cutting and welding practices,
   e. the *Contractor’s* safety policies and procedures, and
   f. the PSSP submitted to the CCPO for the *Hot Work* being carried out.

7 Upon mobilization on site, the *Contractor’s* “*Competent Person*” must contact GTAA Fire Prevention Office (416-776-4515) before any *Work* begins to discuss fire safety issues and expectations.

8 Prior to commencing any *Hot Work* activities each day or shift, each worker must have read, fully understand and have checked that all the required precautions as detailed in the posted HWP are in place, and that it is safe to proceed with the Hot Work.

9 Digital copies of each *issued HWP* must be emailed to GTAA Fire Prevention and CCPO at hotwork@gtaa.com for the Project records and for potential follow-up/random audits.

10 Hard copies of all current & past HWP’s must be kept on file by the *Contractor* and must be produced when requested by GTAA Fire Prevention or the CCPO.
11  *GTAA Fire Prevention* and/or *CCPO* will conduct random site audits to ensure that the *Contractor’s Hot Work Permit Process* is being implemented and followed for all Project activities involving Hot Work.

12  Failure of the *Contractor*, their sub-contractor(s), or individual employee(s) to follow the *Contractor’s Hot Work Permit Process*, or failure to implement, maintain and/or follow all fire safety precautions, will result in the immediate stoppage of all Work under the applicable *FAP*. Work will then not be allowed to re-commence until the *Contractor* submits an incident report to *CCPO* detailing the noncompliance with the *Hot Work Permit Process*; and the corrective actions taken to remedy the noncompliance.

### 7.6.2.2 Fire Watches

1  **Application**

   Where heat, sparks or flame from considerations listed under Article 7.6.2.1. of this *Code* may come in contact with combustible, flammable or explosive materials or where life safety systems, emergency or fire routes are affected, the *Contractor* shall provide a designated *Competent Person* (other than the *Person(s)* doing the *Work*) to be present at all times and to act as a fire watch.

2  **Designation of Fire Watch Personnel**

   The *Contractor* shall:

   a. Provide a designated *Competent Person* to perform fire watch who must always be present and must not perform other duties;

   b. Ensure the requirements of the *National Fire Code* respecting a fire watch are maintained and perform inspections for smouldering materials or other potential sources of fires at regular intervals following the *Hot Work* and at the end of each work shift;

   c. Ensure the fire watch is trained in the operation of a fire extinguisher, fire extinguisher practices, fuel spills and fire alarm procedures, and is instructed in the response required in the event of a fire, including notifying the *Airport Operations Centre (AOC)*;

   d. The number of *Persons* required to act as fire watch personnel shall be specified in the *Contractor’s Project*-Specific Fire Safety Plan as reviewed and authorized as acceptable by GTAA Fire & Emergency Services (F&ES);

   e. Ensure that the site is monitored by the fire watch for the required time after completion of all *Hot Work* as indicated on the *GTAA Contractor’s Hot Work Fire Safety Sign-off Checklist*.

### 7.6.2.3 High Risk Activities, Locations and Systems Shutdown

1  Where the *Work* compromises the performance of any fire protection system, where the system is temporarily shut down or inoperable, fire watch shall be provided and conducted according to the *National Fire Code* and the requirements of F&ES.
2 Where a significant area of a Building is subject to the requirement of a fire watch approach, the Independent Code Compliance Consultant (ICCC) shall be invited to provide review and assessment of building code requirements and interventions affording equivalent levels of life safety provisions for the temporary duration. Such assessment will be conveyed to F&ES to administer it further.

3 During Work involving extreme and potentially high-risk fire hazard conditions, F&ES will provide stand-by, if deemed necessary by the FAP process due to the nature of Work. Such provision requires the approval of the Fire Chief and may be subject to costs payable by the Contractor involved.

7.6.2.4 Open Burning/Flame Operations
1 No open burning of any material is permitted at the Airport.
2 No open flames from Construction activities involving tar kettles, torches, welders, salamanders, barbecues, smudge pots or similar equipment shall be allowed unless a FAP has been issued and a Hot Work permit is in place as detailed in the Contractor’s PSSP and Article 7.6.2.1. of this Code.

7.6.2.5 Explosives
1 The use of explosives is prohibited at any Place of Work unless written prior permission is obtained from the GTAA Corporate Safety and Security Department and the GTAA Fire Chief and F&ES are on site to monitor the operation.
2 The use of powder-actuated fastening devices is prohibited at any Place of Work at the Airport unless prior written permission is obtained from the CCPO and the operation is monitored by the Contractor’s site superintendent.
3 The use of any such devices must be specified in the Contractor's PSSP as reviewed and authorized by the GTAA.

7.6.2.6 Fire Extinguishers
1 Sufficient Type 6A 80BC fire extinguishers (minimum rating) shall be readily available as prescribed throughout the Place of Work and at each location where Hot Work is being performed.
2 They shall be properly maintained and inspected and be visible within the maximum travel distance of 22.5m in any area under Construction.
3 Each extinguisher shall have a valid inspection data tag affixed.
4 For large Construction sites, two separate fire extinguisher staging areas shall be identified and signed “empty extinguishers” and “full/spare extinguishers”.

7.6.2.7 Fire Hose Cabinets
1 Fire hose cabinets shall always be kept clear of obstructions and be accessible.
2 Wherever an existing fire hose cabinet is obstructed by Construction, the Contractor shall provide access acceptable to the F&ES without the use of a key.
7.6.2.8 **Fire Hydrants**

1. Fire hydrants must always be kept clear of obstructions and be accessible.
2. No parking is permitted within 3m on either side of a fire hydrant.
3. Fire hydrant use by Contractors is strictly prohibited unless GTAA Facilities Department authorizes permission for use in advance. Metering and back-flow prevention requirements for such use shall be determined by and requires pre-authorization by the GTAA to use designated fire hydrants that are metered and have a back-flow prevention device installed.
4. The GTAA has several fire hydrants specifically equipped to load water trucks at the Contractor’s expense for dust control purposes. Instructions for obtaining a Fire Hydrant Permit and for use and operation of GTAA fire hydrants may be found in the publication GTAA Fire Hydrants – Standard Operating Procedures 003 – Facilities.
5. Contractors may obtain a Fire Hydrant Permit by completing a GTAA Fire Hydrant Approval Form and submitting it to the Maintenance Planning Department of the GTAA Facilities Department not later than 72 hours prior to the date required for use.

7.6.2.9 **Fire Routes**

1. All proposed and designated fire routes on Airport Lands shall comply with the specified requirements of F&ES for each Project.
2. Fire routes to and from all Buildings shall be established and always kept clear. Vehicles, storage dumpsters, materials or other obstructions must not block fire routes at any time.
3. Surface gravel areas within a designated fire route shall be capable of supporting and withstanding live loads of responding fire apparatus in all weather conditions.
4. Fire routes shall be kept free of snow and ice accumulation during the winter months where designated within the Place of Work.

7.6.2.10 **Compressed Gases**

1. Storage restrictions
   a. No compressed gases shall be stored at the Place of Work unless such storage is in accordance with F&ES requirements. Storage locations shall be identified in the Contractor’s mobilization plan.
   b. The storage of flammable gases within Buildings is strictly prohibited. Safety Data Sheets (SDS) shall be readily available at the Place of Work. All other storage shall comply with the requirements of Part 3 of the National Fire Code.
   c. The Contractor’s name shall be clearly identified on all cylinders, storage and transportation cages.
2. Usage Restrictions

b. The use of flammable gases within below grade levels of Buildings or Structures, or within maintenance holes, service tunnels or similar locations shall conform to the requirements for confined spaces under the Occupational Health and Safety Act R.S.O 1990, C. 0.1 and O. Reg. 213/91 Regulations for Construction Projects and O. Reg. 632/05 Confined Spaces.

7.6.2.11 **Natural Gas Installations**

1. Installation of all-natural gas and propane systems and equipment at the Airport shall conform to the requirements of the following:

   a. National Fire Code,
   b. Occupational Health and Safety Act,
   c. CSA B149; Natural Gas and Propane Installation Code, and

2. Installation of natural gas and propane systems and equipment shall be performed only by Persons having a G.1 or G.2 certificate as issued by the Technical Standards and Safety Authority.

7.6.2.12 **Temporary Heat**

1. Temporary heating units exhibiting an open flame or any type of glowing element to be used within a Building must be specified in the Contractor’s PSSP with provisions in accordance with F&ES requirements.

2. Persons connecting propane or natural gas heating units must have a valid Record of Training.

7.6.2.13 **Use, Handling, Storage and Disposal of Flammable Liquids**

3. General Restrictions

   a. Storage of flammable liquids is prohibited within Buildings unless prior permission is granted by F&ES in accordance with the following requirements:

      i. Storage and handling of flammable liquids and their containers shall conform to the requirements of Part 4 of the National Fire Code.

      ii. Storage is not permitted in or near Public Spaces, and

      iii. Storage of permitted liquids must be in ULC labelled containers stored within a ULC labelled flammable liquid storage cabinet.

   b. The Contractor shall establish and implement written procedures for the safe use, handling, storage, transportation and disposal of flammable liquids pursuant to current SDS procedures which shall be provided to their employees.

   c. No rags contaminated with oils, fuels, solvents, paint products or other flammable substances shall be allowed to accumulate at the Place of Work unless they are stored in approved self closing metal containers.

4. Spray Painting/Paint Restrictions
a. Spray painting with flammable liquids, solvents, thinners, etc. is prohibited unless prior permission is obtained from GTAA F&ES.

b. Paints and other associated products including solvents, thinners, urethanes, etc. must not be left in open containers where permitted to be stored during the Work. Covers shall be replaced to ensure that containers are properly sealed.

c. Specific restrictions that apply within and near Terminals and Public Spaces will be determined by GTAA F&ES in accordance with the National Fire Code.

5 Maintaining Exits

a. All exits and access to exits shall be maintained free and clear of any and all obstructions and impairments that may restrict access and exiting.

b. Temporary fire separations and fire-rated construction assemblies must always remain in service during the Work or as long as practicable to prevent the unwarranted spread of fire.

c. Doors in fire separations must not be blocked in any manner or left open at any time during any phase of the Work.

7.6.2.14 Offices, Trailers and Temporary Workshops

1 Contractor trailers and material/equipment trailers shall be identified on a mobilization plan and must be authorized in advance by the CCPO. To assist GTAA F&ES during an emergency response, the GTAA Project Manager will be responsible for:

a. assigning a unique address number identification, which must be submitted to GTAA Fire Prevention and Continuity & Emergency Management Programs for review and approval,

b. posting signs prominently on each trailer,

c. notifying the Airport Operations Centre (AOC) of the address information to be utilized for emergency dispatching, and

d. notifying the AOC once a trailer(s) has been removed from the Place of Work.

2 Trailers must not be positioned so as to expose existing Building areas to fire exposure or safety hazards and shall be located a minimum of 3m clear from all Building, Structures and Primary Security Lines (PSL).

3 All Contractor offices, trailers and temporary workshops shall be equipped with adequate fire, emergency equipment and signage satisfactory to GTAA F&ES.

4 A final review of the Contractor offices, trailers and temporary workshops is required by the Area Fire Prevention Officer before becoming operational.

7.6.3 Mobilization Plan

1 The Contractor shall establish a plan layout and procedures for mobilization that identify the following:
a. assessment of existing site conditions,
b. trailer or office location,
c. traffic plan,
d. material and machinery movement,
e. pedestrian safety measures,
f. parking,
g. laydown areas,
h. fire extinguisher staging areas for “empty” and “full/spare” fire extinguishers,
i. compressed gas storage,
j. fencing and hoarding,
k. location of all waste containers,
l. access/egress routes,
m. fire, first aid, emergency facilities and mustering points,
n. washroom facilities, and
o. lunchroom, break, and smoking areas.

7.6.4 Housekeeping

7.6.4.1 Contractor’s Responsibility

1 Work areas (including concealed spaces) shall be kept clean and organized. The Contractor shall provide general clean up of Work areas and deposit large-scale debris in Contractor supplied waste containers on a regular basis and at least daily.

2 Contractor shall be responsible for the placement and maintenance of covered waste containers. The type and location of containers may be authorized by the applicable Airport Construction Coordinators (Airside, Groundside or Terminals).

3 Airport disposal systems of any type shall not be used at any time for Construction debris.

4 Dumping or burning of any material on Airport Lands is strictly prohibited.

5 Public Spaces in Terminals shall always be kept clean and clear of equipment and obstructions during normal operating hours. Prior to the start of the Terminal’s operating day, any Work-related debris, materials and equipment shall be cleared from all Public Spaces.

6 Where the Work occurs next to Public Spaces, walk-off mats shall be provided on the inside of all egress points from the Place of Work to minimize dirt and debris from tracking beyond the limits delineated for the Work. Contractors shall clean up all dirt and debris caused by such construction access, and repair/replace any materials damaged by such Contractor access to match existing materials subject to the prior written approval of the GTAA.

7 Oils, grease, dust and other chemicals and materials which could cause a slip hazard, damage to the floor materials, the applied finish or otherwise reduce the friction coefficient of the surface of GTAA-maintained floors, shall be cleaned immediately upon contamination. Warning notices and/or barriers to divert traffic may be provided only on a temporary basis.
8. Hazardous waste shall be stored in appropriate containers and removed from the Place of Work at the end of each shift or as often as necessary as to not to create a hazard.

7.6.4.2 Cleaning

1. The Contractor’s cleaning personnel shall supply its own equipment and materials.

2. The Contractor’s cleaning personnel shall be responsible for final cleaning of the Place of Work and adjacent areas affected by the contracted Work before the Work will be accepted by the GTAA for occupancy/use.

3. The Contractor shall be responsible for cleaning up all areas during and after each shift, including washrooms and areas outside of the Place of Work affected by the contracted Work. Any garbage, dust, dirt and spills not attended to by the Contractor requiring the cleaning staff of the GTAA to perform, shall be the cost responsibility of the Contractor.

4. The Contractor shall schedule cleaning activities so that the resulting dust and airborne debris will not affect any operation of the Airport. Building systems shall be isolated and the Place of Work sealed off from other parts of the Building when dust impacted activities, or activities generating offensive odours are being performed.

5. During final cleaning activities at the Place of Work, the following shall be the responsibility of the Contractor where it applies to the Work:
   a. Remove grease, dust, dirt, stains, labels, fingerprints and other foreign materials from interior and exterior finished surfaces and fixtures including glass and other polished surfaces.
   b. Clean lighting reflectors, lenses, bulbs and other transparent surfaces.
   c. HEPA vacuum all affected surfaces.

6. Broom clean paved surfaces and rake clean other surface areas of the Place of Work. Remove Construction-related waste, debris and surplus materials from the Place of Work and areas adjacent to it.

7. Flush and clean out maintenance holes and catch basins including gratings, where affected by the Work.

7.6.4.3 Trash Chutes

1. Trash chutes shall not empty into a Building but shall empty directly into an exterior dumpster, unless adequate dust control and area separation measures are provided as detailed in the Contractor’s PSSP and reviewed by the CCPO.

2. Trash chute openings shall be secured at the end of the day with a protective cover that will prevent the potential spread of fire into the Building via the chute.
7.6.4.4 Maintenance of Road/Surfaces/Sidewalks

1. The Contractor shall be responsible for the cleanliness of roads surrounding the Place of Work due to tracking of dirt, mud and other materials by vehicles leaving their Place of Work.

2. The Contractor shall be responsible to clear ice and snow from the Place of Work and accesses to such areas, and to remove and dispose of such accumulated ice and snow from Airport Lands.

3. Whenever the Contractor is hauling pavement base, dry fill or other granular material or debris on or across aprons, taxiways, runways or roads, vehicles shall have an appropriate cover to prevent foreign object debris (FOD) and implement all other necessary precautions to prevent spillage or dropping of the vehicle content. Where spillage of material occurs, the Contractor shall immediately notify the Airport Operations Centre (AOC), and clean up the spillage immediately in accordance with this Code.

7.6.4.5 Tripping Hazards

1. Floor areas and other surfaces on which Persons must walk within Work areas and any other area(s) associated with the Work shall be regularly checked for any type of unsafe conditions, obstacles, materials and details that could cause a Person(s) to trip while walking.

2. Temporary installations (i.e. power cords, pipes etc.) or activities that create an uneven floor surface shall require adequate transition strips and markings to prevent tripping hazards as detailed in the Contractor’s PSSP and reviewed by the CCPO.

7.6.5 Personal Protective Equipment

1. The Contractor shall establish and implement a procedure identifying the personal protective equipment required at the Place of Work, as well as its use, inspection, maintenance, limitations and training requirements.

7.6.6 Work Area Hoarding and Barriers

1. Each Place of Work shall be clearly identified and protected by a suitable barrier in accordance with the GTAA Construction Hoarding and Barriers Guidelines to restrict potential access by the public and other unauthorized persons as the type of Work warrants and as authorized by the CCPO.

2. The Contractor shall be responsible for providing and maintaining all temporary interior and exterior hoarding or barriers in accordance with the GTAA Construction Hoarding and Barriers Guidelines.

3. The Contractor shall post a copy of the Facility Alteration Permit (FAP) Placard at every access point into the Place of Work. Refer to Appendix A - 7.6.6.3 - Detail A.

4. The Contractor shall post no other signage on any hoarding within the Terminals except for a bilingual “Authorized Personnel Only” sign. Refer to Appendix A - 7.6.6.4 - Detail B.
5 Where openings are required in the *Primary Security Line (PSL)* they shall be protected in accordance with the requirements of Sections 6.6 and 6.7 of this Code.

6 When installing hoarding or barriers in the *Sterile Area* the *Contractor* is responsible for ensuring that there is a locking system applied so no unauthorized access can be made to the *Place of Work*. The hoarding or barriers must be sufficient to prevent unauthorized access. For further information contact the GTAA Corporate Safety and Security Department.

7 The following requirements for hoarding and barriers shall apply:

   a. **Interior Work Areas**

      i. Adequately braced (or engineered) to ensure structural stability. The GTAA (at its sole discretion) may request a professional engineer’s seal and signature for the hoarding design (depending on complexity);

      ii. Shall be designed to maintain the existing sprinkler coverage. Reflected ceiling and elevation plans showing the locations of the existing sprinklers on both sides of the hoarding or barrier shall be provided to the GTAA for review prior to the start of the Work. Where the existing sprinkler coverage cannot be maintained on both sides of the hoarding or barrier, additional sprinklers shall be provided by the Contractor as required;

      iii. Shall be inspected to ensure that the finished hoarding or barrier is free of all splinters, nails or other protruding hazards;

      iv. Shall be dust-tight, secure and where required by the type of Construction, soundproof, weather tight, and constructed to provide the required fire resistance rating;

      v. Shall extend from floor to ceiling (or minimum 2440 mm high) and be constructed with 92mm steel studs at 400mm spacing and with 13mm gypsum board on the public side. Hoarding and barriers shall be neatly constructed. Gypsum board shall be taped, filled and painted (2 coats) white. Damage to hoarding and barriers shall be promptly repaired;

      vi. The opening between the top of the hoarding wall and the bulkhead or ceiling shall be covered with a dustproof 6 mil poly plastic cover sheet to prevent construction dust from escaping the worksite. The sheet shall be stapled and taped neatly to the inside of the hoarding and to the underside of the bulkhead or ceiling;

      vii. Hoarding shall not be fixed to the base building demising caps, floor, bulkhead or ceilings;

      viii. Hoarding to have a 100mm vinyl or rubber base – light grey in color;

      ix. Graphics on hoarding or barriers will be subject to GTAA’s prior approval;

      x. The Contractor shall provide painted lockable steel doors and frames for required access to and egress from hoarded Construction areas. The Contractor shall provide door lock codes to the CCPO;

      xi. Hoarding and barriers shall not impair required access to or egress from adjacent areas,

      xii. Where hoarding or barriers must be placed in front of fire alarm pull stations, fire hose cabinets or other life safety equipment requiring access, openings in
hoarding shall be provided for access to such items with appropriate signage to indicate their location;

xiii. When the hoarding or barrier is removed, any damage to the base Building bulkhead, ceilings, floor and/or demising caps shall be repaired immediately by the Contractor at their expense; and

xiv. Tack (walk-off) mats shall be used at each entrance/exit to minimize dust outside the hoarding or barrier.

b. Exterior Work Areas

i. The Contractor shall be responsible for providing and maintaining all fencing.

ii. Exterior Construction Places of Work shall be secured at all times by a minimum 1.8m high chain link fence with filter cloth.

iii. Fencing shall have a locked, gated entry to prevent access by unauthorized Person(s) to the Place of Work located within the Restricted Area using a method as determined by the GTAA Corporate, Safety and Security Department.

iv. The Contractor shall supply adequate “No Trespassing” or other appropriate bilingual danger or warning signage and the Contractor’s contact information, which shall be placed conspicuously on the perimeter fencing.

v. The Contractor shall provide copies of the fence cut sheet and a method of installation that complies with the manufacturer’s requirements as part of the FAP application.

vi. The Contractor shall review and certify that the fence installation is in compliance with the manufacturer’s recommendations with bracing in place as necessary for wind/prop wash conditions.

8 Where short duration Work is required, the Contractor shall:

a. provide solid barriers, and

b. bilingual signage advising persons of the hazard.

Where the short duration Work is at heights, the Contractor shall provide signage, spotter and barriers situated at least 4.5 m from the actual Work.

7.6.7 Canvas/Tarpaulins

1 All canvas and tarpaulins used to enclose either interior and/or exterior Building areas shall be ULC Listed fire-resistant material with a Flame Spread Rating of 150 or less.

2 Tarpaulins shall always be adequately secured against wind gusts and jet blasts.

7.6.8 Surface Penetrations

1 The Contractor shall establish and implement written procedures for penetrations of the ground or any other surfaces including walls and floors.

2 GTAA Utility Locates Request Procedures must be followed before commencing any Construction that penetrates any ground surface. Refer to Subsection 7.7.3 of this Code.

3 All surface penetrations shall have barriers or guards and bilingual signage placed around them in all directions to prevent the unauthorized access of any Person.
Trenches and excavations that require entry by authorized Person(s) shall have an engineered system to protect such authorized Person(s).

4 Any interior surface penetrations (drilling, coring or cutting) involving concrete slabs, walls, or structural members of a Building must follow the specific procedures for such Building. Refer to Article 7.7.3.6 of this Code and the GTAA Surface Penetrations Guidelines.

7.6.9 Protection of Property and Work in Progress

1 The Contractor shall take all necessary precautions for the safety of occupants and shall provide all reasonable protection to prevent damage, injury, or loss to:

   a. any materials, equipment, systems, fixtures, and furnishings to be incorporated in the Work, whether in storage at the Place of Work or not, under the care, custody or control of the Contractor, and their subcontractors, and suppliers,

   b. other property at the Place of Work or adjacent thereto, including but without limitation, lawns, walkways, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement during the Work, and

   c. other Contractors contracted Work in the adjacent areas.

2 The Contractor shall give all notices and comply with all applicable laws, ordinances, codes, rules, regulations, and lawful orders of the GTAA’s Insurer and any external authority bearing on the safety of property or its protection from damage, injury, or loss and further, shall cooperate and keep Tenants, the GTAA and other Contractors informed of all the Contractor’s precautions for the protection of the respective property.

3 The Contractor shall be solely responsible for the design, installation and maintenance of all temporary Structures such as, but without limitation to, all necessary fencing, bracing, framing and structures or structural elements to prevent the failure of materials or temporary facilities required in the execution of the Work that could result in damage to property or the injury or death of persons.

4 The Contractor shall take all reasonable precautions to ensure that no part of any Structure of any description is loaded beyond its rated bearing capacity.

5 The Contractor shall not permit open fires within any Building or any exterior area at the Place of Work. Refer to Article 7.6.2.4 for permitted open flame restrictions.

7.6.10 Access to Areas of Work

1 At the expense of the Contractor, all provisions for access to Work areas such as roads, bridges or culverts for drainage channels shall be installed, as may be necessary at locations authorized by the CCPO. All such temporary measures shall be removed by the Contractor to the extent required upon completion of the Work, to reinstate the area to its original condition if it is not part of the Work to do otherwise.

2 There may occasionally be the need for Contractors to access areas under a Tenant’s control or area under Construction by Contractors working on other scopes of Work.
Affected Tenants and Contractors shall fully cooperate and coordinate the Work with other Projects to the maximum extent possible to avoid or mitigate any delay or hindrance of Work activities by either party.

7.6.11 No Smoking Policy

1. The GTAA has a policy of NO SMOKING at the Airport except in designated areas subject to authorization by the GTAA.

2. Smoking is not permitted at the Place of Work or in areas of Construction access.

3. For specific requirements for Airside areas, refer to Article 8.3.1.5.

7.6.12 Confined Spaces

1. The Contractor’s PSSP shall include procedures that conform to the requirements for confined space entry.

2. The Contractor shall identify all existing labeled confined spaces within their Place of Work and conduct an assessment prior to accessing these confined spaces.

3. The Contractor shall identify where their Work could create a confined space as defined by the applicable regulations.

4. The Contractor shall establish and implement Work site-specific procedures for confined space assessment, monitoring, entry, work and rescue.

5. All persons supervising, entering, monitoring, attending or providing rescue from a confined space shall possess a valid Record of Training by a qualified confined space training provider.

7.6.13 Working at Heights

1. General Requirements
   a. The Contractor’s PSSP shall include procedures that address working at heights.

2. Fall Protection
   a. The Contractor shall establish and implement a written safe work procedure to identify all potential fall hazards and the methods of fall protection with fall prevention and/or fall arrest measures to be provided to protect all Persons who may be exposed to a fall hazard.

   b. All Construction personnel who may be exposed to a fall hazard must possess a valid Record of Training (ROT) complete with work-specific fall prevention procedures detailing the use, inspection, maintenance and limitations of equipment and the rescue procedure to be followed.

   c. The fall prevention procedure shall address as a minimum and at each stage of the Work:
      i. guardrails/handrails (location, type, required rating, inspection and maintenance),
ii. floor coverings (location, type, required rating, inspection and maintenance),
iii. travel restraint (location, type, personal protective equipment, approved anchor points),
iv. personal protective equipment (type, inspection, maintenance and limitations), and
v. barriers and signage.

d. The fall arrest procedure shall address at a minimum and at each stage of the Work:
   i. fall restraint (location, type, personal protective equipment, approved anchor points),
   ii. fall arrest (location, type, personal protective equipment, approved anchor points),
   iii. personal protective equipment (type, inspection, maintenance and limitations), and
   iv. rescue procedure.

3 Ladders, Scaffolds and Work Platforms
   a. The Contractor must develop written procedures that address the selection, design, use, maintenance and inspections of ladders, scaffolds and work platforms.
   b. Where frequent access or emergency egress is required to a Work area above or below ground scaffold stairs shall be provided.

4 Falling Materials
   a. The Contractor must develop written procedures to prevent equipment, materials or tools from falling.
   b. Where Work is performed adjacent to or above a public thoroughfare or access to the Place of Work, overhead protection shall be provided.

5 Roof Access
   a. Contractors must develop procedures to restrict, control and monitor access to roof areas.
   b. Access to Terminal roof areas is restricted. Contractors must obtain a Roof Access Permit.
   c. Roof Access request can be submitted on-line at:

7.6.14 Material Handling Safety
1 Asbestos Containing Material
a. Where removal of Asbestos-Containing Material (ACM) forms part of the Construction, the Contractor shall follow the GTAA Environmental Services work authorization procedures as outlined in Subsection 5.6.2 of this Code.

b. Where ACM is disturbed as a result of Construction, the existing protocol for “Asbestos Incident Response Procedures” as outlined in Section 3.5 of the Environmental Emergency Contingency Plan, and the Routine Procedures to Enter/Exit Asbestos Contaminated Work Areas issued by the GTAA Incident Management Department shall be followed.

c. If ACM is unexpectedly found to be present at the Place of Work, all Work shall stop within the room or floor area where the ACM is found, and the affected area cordoned off by a barricade until appropriate authorities are notified.

2 Workplace Hazardous Materials Information System (WHMIS)

a. The Contractor shall comply with requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials, and regarding labelling and provision of material safety data sheets (WHMIS).

b. Maintain copies of the Safety Data Sheets (SDS) or the former Material Safety Data Sheets (MSDS) at the Place of Work readily available for review by workers, emergency personnel, and the ICSC.

c. Hazard-specific procedures must be established for the use, handling, storage and disposal of hazardous materials.

d. All Persons at a Place of Work must have a valid Record of Training for WHMIS that has been updated or reviewed within the previous 12 months.

3 Air Quality

a. The Contractor shall establish procedures to eliminate or control the generation of dusts, mists, fumes, vapours, smoke and offensive odours created by their Work.

b. The Contractor shall monitor oxygen levels as well as the levels of potential airborne contaminants to ensure they do not exceed acceptable limits.

c. The PSSP should include Competent Worker and procedures for testing and maintaining records.

d. Refer to Section 5.10 of this Code.

4 Lighting

a. The Contractor shall always maintain a minimum illumination level of 45 lux while Work is in progress. Contractors may be required to provide additional task lighting depending on the nature of the Work.

5 Storage and Laydown of Materials and Equipment

a. The Contractor’s Mobilization Plan should clearly identify material and equipment laydown areas.
b. The Place of Work should have appropriate barriers and a copy of the FAP Placard posted to identify the Contractor and the supervisor’s contact information.

c. Materials and equipment must be maintained within the barriers and not become a hazard to the public or the occupants.

6 Equipment, Tools and Machinery

a. The Contractor shall establish and implement a procedure to ensure that all equipment and machinery are inspected and certified as required by a Competent Person prior to arrival at the Place of Work and by the operator prior to each use. The procedure must be accompanied by:

i. applicable manufacturers’ specifications,
ii. Engineers’ drawings and specifications,
iii. log books,
iv. operator’s manuals, and
v. other safe operating instructions applicable to the equipment or machinery.

Such documentation shall be maintained at the Place of Work.

b. All Persons operating equipment, tools or machinery shall have readily available a valid Record of Training (ROT) as required for the equipment, tools and machine used and particular to the manufacturer and model if requested. All persons providing rigging for or signalling for a crane must have a ROT.

c. All mobile equipment being used within Terminal areas must come equipped with:

i. signage clearly identifying the owner of the equipment along with contact information,
ii. non-marking wheels and/or wheel covers, and
iii. drip containment absorbent pads.

7 Use of Crane Equipment Notice

a. All cranes and other hoisting equipment on Airport Lands and near the Airport shall be authorized in advance by GTAA Aviation Services for specific requirements and scheduling of their use. Contractors shall allow at least 10 working days notice to obtain such authorization.

b. If possible, GTAA Aviation Services may accept a minimum of 72 hours notice, provided the conditions for the equipment use are not complex and do not involve other authorizing agencies.

c. Further to Sentences a) and b) above, each crane use request is assessed for compliance with the Obstruction Limitation Surface (OLS). The GTAA may also request further evaluation from Transport Canada and Nav Canada. Jointly, certain restrictions may be stated regarding dates, times and height so that the lift(s) can proceed with the least impact on aeronautical operations.

d. Information to be provided with each crane request includes:
i. location of each crane;
 ii. maximum height of each crane projection above ground elevation using “Above Sea Level”;
 iii. maximum horizontal turning arc of crane boom;
 iv. date(s), time(s) and duration(s) of lift; and
 v. contact name and cell phone number of the Person directing the crane operation at the Place of Work.

e. Once the crane use is authorized, the crane operator will be issued written notice with specific conditions from the GTAA to commence operating the crane. All requirements and restrictions stated in the notice shall be followed without exception, including the Airport Operations Centre (AOC) being contacted prior to starting the Work, and again upon its completion.

f. Whether on Airport Lands or not, a violation of Airport Zoning Regulations is a federal offence and Persons may be subject to arrest, fines, and/or imprisonment on summary conviction.

g. Crane operations are monitored, and Persons found not complying with the above requirements will be ordered to take down the crane. Contractors working on Airport Lands may be subject to being removed from the Airport after a first offence.

8 Traffic Control

a. All temporary traffic or lane closures must meet the Ontario Traffic Manual (Book 7) requirements. Depending on the complexity of the temporary requirements, a Work site-specific procedure including a professionally engineered traffic plan may be requested.

b. The Contractor shall establish and implement a Traffic Control Procedure to ensure that all equipment and vehicles are operated in a safe manner at the Place of Work, and any other area associated with the Work. The procedure shall:

i. minimize the backing up at the Place of Work,
 ii. identify overhead or other hazards,
 iii. ensure adequate delineation and signage,
 iv. ensure safe access and egress from the Place of Work,
 v. ensure vehicles are equipped with the appropriate protective and warning devices,
 vi. ensure traffic control/signal persons have the appropriate equipment and are trained, and
 vii. address pedestrian traffic routes to minimize the interaction between construction workers, materials and equipment with the general public and occupants.

c. All persons operating vehicles shall have a valid driver’s license or certification for the type of vehicle operated. All Persons providing traffic control or signalling of vehicles or cranes must have readily available a valid ROT and must understand the Work site-specific procedures.
d. Obstruction of any traffic lane or any interruption of roadway traffic because of Work shall be authorized by the GTAA as notified by the Groundside Construction Coordinator through the approved Activity Notice. Provision of and payment for any special services that may be required shall be the responsibility of the Contractor.

e. Existing traffic control systems such as street signs, traffic signals, traffic lane markings and any other equipment or facilities that aid in the control of traffic shall be protected. The Contractor shall be liable for any damage to these systems or any injury or damages to Persons and property, which might result from failures in the traffic control system caused by the Contractor’s operations.

7.6.15 Energy Control

1 Electrical Safety
   a. The Contractor shall provide electrical safety procedures relevant to the Work or Place of Work. These procedures must address considerations such as:
      i. clearance and identification of overhead power lines,
      ii. Work near live electrical conductors,
      iii. arc flash protection, and
      iv. access to electrical rooms, vaults, or utilidors.
   b. Electrical extension cords shall be CSA approved, and suited for their intended purpose.
   c. Ground fault circuit interrupters (GFCI) shall be provided for all electrical equipment and tools used outdoors or in damp atmospheres.
   d. Electrical appliances, tools and equipment shall be disconnected when not in use.
   e. All contracted Work-related wiring and equipment for lighting, heat or power shall be in accordance with the Canadian Electrical Code and inspected by the Electrical Safety Authority.
   f. When a Tenant moves out of a space an outgoing inspection will be required to ensure the safety of all electrical connections.
   g. No open wiring shall be present at the Place of Work. Wires must be capped with marettes, taped and enclosed within a secured junction box complete with a cover.

2 Energy Control and Lockout Procedures
   a. Lockout requirements come into effect when a system or pieces of equipment represent a potential hazard to life and/or property, and apply to the following energy sources;
      i. electricity,
      ii. pneumatics,
      iii. hydraulics,
      iv. steam,
v. pressure pipelines,
vi. pressure vessels,
vii. gravity, and
viii. residual energy.

3 Lockout Procedures

a. The Contractor must develop a Work specific lockout procedure to ensure the safety of its workers, all Persons affected by the Work and protection of equipment and installations.

b. Procedures must be reviewed by the GTAA, prior to use, where the Work will affect operating systems. The Contractor shall make application to the Maintenance Planning Department of the GTAA Facilities for a Shut Down request. Refer to Section 7.7.


d. Procedures must contain as a minimum, the concepts of; Isolate-Lock-Tag-Test; “First lock on - Last lock off”; and every worker affected by the energy source must utilize a lock and tag to control the energy source.

7.6.16 Enclosed Spaces

1 The Contractor shall be responsible for assessing and documenting the condition of any enclosed ceiling or wall spaces before any worker enters these areas to perform Work. Refer to Subsection 7.2.2 for Reporting Unsafe Conditions.

2 Any unsafe conditions found within these spaces must be addressed prior to the performance of any Work.

7.7 Airport Systems Disruptions

7.7.1 General

7.7.1.1 Application

1 The following procedures to perform a shut-down as part of the Work apply only to Airport systems controlled and monitored by the GTAA, and to Tenant systems that would affect, impair or otherwise disrupt GTAA systems in any way.

2 The following Airport systems for which the shut-down procedures apply include:

   a. HVAC, plumbing, sprinkler and standpipe, fire alarm, access control, communication, baggage handling, aircraft bridges, elevator/escalator/moving walkway/APM/UP Express, power supply, lighting, aircraft fuelling, gas, water and fire main, storm and sewage systems.
3 Work requiring modifications and/or additions to GTAA systems and requiring shut-down procedures shall perform the following steps before starting such Construction:

a. The Contractor shall have a valid Facility Alteration Permit with a validation number.

b. The Contractor shall notify the Maintenance Planning Department of GTAA Facilities at least five business days in advance of the Work and request specific assistance to perform the required actions by the GTAA.

c. The Contractor shall provide at this time, the system, the type of action needed, location(s) of the Work, the purpose, date and time required, duration and name of requesting Contractor.

d. The Contractor shall be responsible to protect, relocate if required, and maintain existing active services when encountered. Inactive services shall be capped off and/or removed as determined as part of the requirements and design for the Work. Permission to perform such Work shall be obtained from the GTAA by confirming a system shutdown authorization prior to commencement.

4 At the end of each shift, all life safety building systems are required to be reinstated until the start of subsequent shifts on the system whereby another shut-down may be required as part of the original request.

5 At the completion of the modification or additions to the Building system(s) the Contractor shall notify the Maintenance Planning Department of the GTAA Facilities to reactivate the system(s) to allow for testing and verification of system(s) provided by the Contractor.

6 At the end of a shut-down if there are any possible or known impacts to the security system as determined by the GTAA Security Operations Centre the Contractor must arrange and provide for any mitigations or measures which may include guards, equipment or other necessary methods until the system is back up and running.

7.7.1.2 Systems Shut-down Procedure

1 The Contractor making such a request shall provide the necessary information on a completed Toronto Pearson Construction Activity Request which can be found online www.torontopearson.com/en/operators-at-pearson/construction/contractor-activities and must be fully completed as applicable (pages 1 & 2) and then automatically submitted by pressing the blue “Submit Form” button on the top right corner of page 1 of the form.

2 Status enquiries for submitted requests should be forwarded to the applicable Airport Construction Coordinators.

   a. For Terminals - activitynotice@gtaa.com

   b. For all Groundside Work – all non-Terminal Buildings, roads, bridges, Terminal curbs, parking lots, APM Train stations and parking garages outside the PSL - groundsideoperations@gtaa.com
c. For the Airside areas and Crane Permits - construction.coordinator@gtaa.com

3 No shut-down shall commence until the request has been authorized by the GTAA.

4 Notify the Maintenance Planning Department of the GTAA Facilities that the system shut-down is about to commence prior to proceeding with the shut-down.

5 Notify the Maintenance Planning Department of GTAA Facilities when the shut-down is complete, and the system is put back in service.

6 The Contractor making the request shall not leave the Place of Work until the system has been put back in service and has been verified by the GTAA.

7.7.2 Fire Protection System Shutdowns

1 No fire protection impairment due to the Work shall take place in any Building unless a minimum of 72 hours advanced notice is given to F&ES. Where shut-down of fire protection systems is unavoidable, refer to Article 7.7.1 for systems shut-down procedures.

2 Fire protection impairments in existing Buildings may require that a fire watch be provided at the expense of the Contractor for the full-time duration of the impairment and as prescribed by F&ES requirements. The preservation of existing fire protection systems or an equivalent thereof, is essential during all phases of the Work in occupied Buildings.

3 Expenses for false alarms, caused by any Contractor Work activity after failing to perform the above procedure, may be charged to the Contractor by the GTAA.

7.7.3 Utility Damage Prevention Program

7.7.3.1 Scope

1 The Construction Compliance & Permits Office (CCPO) has implemented a Utility Damage Prevention Program with an established set of policies and procedures to oversee safe ground penetrations practices and methods to avoid damage to buried utilities on or near the Airport Lands.

2 Each excavating Contractor must obtain and provide to the equipment operator locates for all utilities within, and adjacent to the Place of Work involving any ground penetration per O. Reg. 213/91 section 228.

3 The GTAA maintains a zero-tolerance policy for damages to utilities caused by any Person engaged in Work on Airport Lands.

4 The GTAA provides the services of an Independent Utility Locating Contractor (IULC) to all Contractors. The Independent Utility Locating Contractor (IULC) is engaged through notifications by the email address locates@gtaa.com. Additionally, Contractors are required to engage PIFFC to acquire fuel line and equipment locates through notification by the email address locates@fsmgroup.ca.

5 The GTAA does not guarantee the validity of information provided for the locations of any utilities, whether such information is provided by the GTAA or other utility owner sources.
6. The policy of the GTAA respecting any ground penetrations and utility protection requires all Contractors to use non-destructive methods when within one metre of utilities or where the location of a utility is not known.

7. Utility damages resulting from Contractor Work must be reported to the Airport Operations Centre (AOC) and fully restored to original conditions by the Contractor at their expense. Such occurrences shall be subject to a thorough investigation by the GTAA and the Contractor responsible may be subject to additional costs for operational impact, as determined by the GTAA.

8. All repairs made to damaged utilities must be completed to Airport standards, and all information regarding the repair must be fully documented and submitted to the CCPO.

9. The planning or design of a Project that involves any ground penetration must include a subsurface utility engineering (SUE) survey. The Project will be responsible for all costs associated with obtaining the services of a reputable utility locator to help with the SUE survey to locate all subsurface utilities prior to finalizing the design.

7.7.3.2 Roles and Responsibilities

1. The IULC is responsible for providing visual markings and stakes to locate all utilities owned by the GTAA that may be impacted by Work involving any ground penetrations.

2. The IULC is responsible for locating only those utilities for which the GTAA has provided information records that indicate the existence and approximate location of each and that are possible to locate using current instrumentation. Non-metallic pipes and fibre-optic cables, unless installed with a copper trace wire, cannot be located.

3. Where any ground penetration takes place beyond or adjacent to the boundaries of the Airport Lands, Ontario One Call Ltd. provides notifications to its participating members to initiate locating their utilities at the peripheral areas of the Airport. It is the responsibility of the Person requiring utility locates to contact all other utility owners suspected of being in the area(s) of soil disturbance to obtain required locates prior to digging. Neither the GTAA nor Ontario One Call Ltd. are responsible for conducting such contact on behalf of any Person performing any ground penetrations.

4. The GTAA is responsible for initially locating and physically marking its own utilities for Contractors at no cost to the Person performing the soil disturbance. The subsequent loss or destruction and time lapsing beyond 30 days of such placed markings by any Contractor working in the area(s) of soil disturbance will be the responsibility of such Contractor to pay the IULC directly to have the markings restored where they are required again.

5. Contractors must notify the IULC prior to commencing any subsurface utility engineering (SUE).
6 Contractors engaged in Work involving ground penetration on Airport Lands are responsible for obtaining a Utility Locates Report from the IULC and PIFFC Locator prior to penetrating the surface and abiding by the policies and procedures related to soil disturbance.

7.7.3.3 Utility Locates Procedures

1 Utility locate requests shall be submitted by email by the excavating Contractor directly at least 5 business days in advance of commencing any surface penetrations when the location of the Work is identified as “at or near Toronto Pearson Airport”. Requests are submitted by sending one email addressed to locates@gtaa.com, locates@fsmgroup.ca, and constructioncompliance@gtaa.com that includes the following:
   a. Facility Alteration Permit (FAP) number,
   b. Contact Person Name and Contact Information,
   c. Full Address of the Requesting Company, and
   d. Location of Work (include drawing of the area).

2 When the IULC has completed the locates, the IULC will meet with the excavating Contractor to explain the content of the locate document and review the specific safe practices required for each area marked. The requesting Contractor will receive a copy of the locate document following the issuance of the FAP (orange placard).

3 A meeting place and time with the IULC shall be requested that is closest to the area of soil disturbance. This meeting will facilitate the sharing of information and does not imply that locates will be performed at that time.

4 Unless otherwise determined by the IULC, Contractors shall use hydro-vacuum equipment to expose all underground utilities below and crossing points to be excavated.

5 Contractors shall maintain the continuous operation of all utilities and care of Structures identified by visual markings and adequately protect them from damage.

6 Where buried utilities or Structures are encountered during excavating that were not known or shown to exist, the IULC shall be contacted to review the site. GTAA Engineering and the CCPO may become involved to provide direction for removing or rerouting such utilities.

7 Where the relocation or removal of a conflicting utility or Structure is required, a change of scope to the Facility Alteration Permit shall be submitted to the CCPO with supporting information for review prior to any physical action taken by the Contractor.

8 It is the responsibility of Contractors to record the location or relocation of such utilities and Structures and provide them to the CCPO when requested to do so.

9 Any damage to utilities and Structures shall be reported immediately to the Airport Operations Centre (AOC).
7.7.3.4 **Confidentiality of Information**

1. All information concerning Airport utilities that is shared with Contractors and their employees for the purposes of Work is strictly confidential and shall not be reproduced, communicated or transmitted to any Person not involved in the Work. The GTAA retains ownership of all Utility Locates Reports and any supplemental information and may request their return at any time during Construction. Upon completion of the Construction, or when requested by the IULC, all Persons in possession of Utility Locates information provided by the GTAA must return all such information to the CCPO.

7.7.3.5 **Utility Information Mapping**

1. As part of the Utility Damage Prevention Program the GTAA is committed to maintaining current and accurate location records for its buried utilities as a means of preventing damage while working on or around buried utilities.

2. It is the responsibility of all Contractors installing buried utilities to ensure that accurate horizontal and vertical control dimensions, taken at turning points, intersections and termination points, are completed as part of the As-Built Document requirements of the Facility Alteration Permit.

3. As part of the utility inspection requirements carried out by the CCPO, routine auditing of required control dimensions may be completed by the IULC to verify the accuracy and completion by the Contractor of As-Built Documents to be submitted.

4. Contractors are required to have available at the Place of Work the drawings used for compiling the As-Built Documents of all buried utilities complete with field notes and location dimensions taken of the final installations. Contractors shall submit a copy of the As-Built Documents to the CCPO immediately upon completion of the installation.

5. Failure to provide such information to the CCPO when requested may result in an order being issued to have any part of the installation uncovered at the cost of the Contractor to verify horizontal and vertical control dimensions as well as to inspect the quality of Work.

6. Subsequent to laying down any underground utility installations, the CCPO shall inspect and record the installations for this stage by taking photographs and using other recording methods where necessary for obtaining current technical data base information and assessing the quality and compliance of the installation.

7. Before backfilling, the Contractor is required to perform by a registered Ontario Land Surveyor, a survey of the buried installations in the open trench with an accuracy of ±10 mm using the Airport geo-referenced coordinates and prepare drawings as part of the As-Built Documents required under Part 9 of this Code. Prior to completing such Work, the installation is subject to the audit requirements of Section 5.9 of this Code.

8. Legal survey information shall include location dimensions, geodetic elevations, size(s) and type of material. Drawings showing all survey and utility information
shall be submitted as part of the Project close-out documentation provided by the Contractor.

9 All As-Built Drawings are to be compiled and digitized in CADD format complying with the GTAA CADD Standards Guide and submitted to the GTAA as part of the required final Record Drawings.

10 As a coordinated function to the above, Contractors are required to notify the CCPO at least two business days in advance of the readiness of the Work for inspection by the GTAA Inspector prior to covering.

7.7.3.6 X-Ray and Scanning Detection

1 Contractors performing x-raying or scanning of embedded services and reinforcing within or below concrete structures shall notify the CCPO 72 hours in advance of performing such Work.

2 X-ray and scanning detection activities as well as subsequent coring, cutting and chipping operations shall be carried out in compliance with the GTAA Surface Penetration Guidelines and in accordance the Contractor’s Project-Specific Safety Plan as submitted to the CCPO for the issuance of their FAP.

3 Adequate safety procedures shall be taken by the Contractor while using this equipment ensuring that no Person is above, below or nearby any area, including ceiling spaces, where and when this equipment is in operation.

4 Costs associated with this activity, including the provision of GTAA approved security guards at the perimeter of affected areas, shall be the responsibility of the Contractor.

5 A digital copy of all scanning reports, engineers’ reviews, and coring sign-off reviews shall be included with all other required FAP closeout & occupancy documentation submitted to the CCPO upon completion of the Work.

6 Refer to Subsection 7.9.3 for additional requirements for surface penetrations of concrete floor slabs within the Terminals.

7.8 Movement of Equipment and Materials

7.8.1 Parking and Deliveries Permits

1 Contractors shall coordinate their parking and delivery requirements for Work within Terminals with Groundside Transportation Services. In general, parking allocation will not be provided or authorized by the GTAA without prior approval.

2 A minimum of 72 hours notice is required, but longer notice may assure parking assignment more closely situated to the Work area access.

3 Parking of Contractor’s vehicles at the Terminal curbs is reviewed on a case by case basis.

4 Unattended vehicles are not allowed within 50m of each Terminal.
5 Only clearly marked vehicles from the following groups are authorized to park at Terminal curbs when, they are responding to an emergency or operational incident and alternate arrangements cannot be readily made:
   a. Police
   b. GTAA K9 Unit
   c. GTAA Security
   d. GTAA Groundside Operations
   e. GTAA Terminal Operations
   f. GTAA Duty Managers
   g. GTAA and Mississauga Fire and Emergency Services
   h. Emergency Medical Services

6 Other Airport Areas have specific vehicle usage requirements depending on the area, residing operations and varying conditions from time to time. Groundside Transportation Services may need to review Contractor parking and delivery requirements prior to starting Work for special operations during Work.

7 There are controlled area parking lots near the Terminals where parking may be authorized for companies and individuals that can demonstrate a valid operational need that cannot be properly accommodated through public parking areas.

8 Controlled area parking permits may be authorized upon application and on a case by case basis. Applications and terms and conditions for these permits may be obtained from Groundside Transportation Services.

9 Garbage dumpsters and staging areas shall be located by pre-arranged assignments reviewed by Groundside Transportation Services. Sufficient advanced notice will ensure a more favourable location to the Place of Work as each case permits.

7.8.2 Delivery of Equipment and Materials

7.8.2.1 Logistics Program

1 Contractor Work areas not within a Terminal, which can be established as entirely Groundside, are not subject to the delivery requirements of Parking and Groundside Transportation.

2 Contractor Work areas not within a Terminal, which are Airside, are not subject to the delivery requirements of the Parking and Groundside Transportation but are subject to the RAIC and escort provisions under Part 6 of this Code.

3 Contractors shall advise the Airside Construction Coordinator, the Airport Operations Centre (AOC) and the GTAA Project Manager (where one is engaged) at least 24 hours in advance of all Airside deliveries of equipment and materials. Under no circumstances will Contractor equipment or vehicles be permitted Airside without a proper escort, all of which are subject to AVOP regulations detailed in Section 8.2 of this Code.
7.8.2.2 **Contractor Responsibilities**

1. Contractors requiring deliveries of materials and/or equipment to a Terminal shall schedule such deliveries to neither delay the progress of the Work nor cause unnecessary accumulation of material for later use.


3. Contractors wishing to schedule deliveries of materials and/or equipment through the Logistics Service Provider may do so by scheduling such deliveries directly with the Logistics Service Provider. Such deliveries are subject to the availability of the Logistics Service Provider.

4. Where stockpiling of materials or storage of any Work equipment is permitted within Land Parcels, the location shall be indicated as information provided to obtain a Facility Alteration Permit (FAP).

5. Storage of materials will be limited to strictly defined Contractor staging areas where specified as a requirement or a condition of the FAP. The Contractor shall take all necessary precautions to ensure materials and debris are protected from wind and do not become airborne.

6. Contractors will be required to develop a site-specific Traffic Control Plan for all Terminal curbside deliveries. Refer to 7.6.14.5 Storage and Laydown of Materials and Equipment.

7.8.2.3 **Protection of Buildings and Property**

1. Terminal passenger elevators shall not be used for the removal of Construction debris or the delivery of equipment or materials unless permitted by the GTAA and adequate provisions and protection of the elevator are assumed by the Contractor. Designated freight elevators may be provided for this purpose during off-hours, arranged with the GTAA in advance. Handcarts used for material deliveries must conform to the requirements of the Logistics Program. No handcarts, dollies or similar devices shall be permitted on escalators and moving walkways.

2. Adequate protection of floor and wall finishes and all existing installations during the transportation of materials to access the Place of Work is required. Floor surfaces and pediments shall be protected by acceptable methods for distributing the loads of heavy transported materials and equipment. No hard-wheeled carts/buggies are permitted on the Terminal surfaces and either white rubber or socked tires must be used.

3. Acceptable soft-wheeled carts or buggies shall be checked before each use to remove any embedded hard contaminates (stones, metal, etc.) from the wheels.

4. Any marking or damage to GTAA property will be the responsibility of the Contractor to clean, repair, refurbish, and/or replace at its expense.

5. Where the Work impacts existing Building Spaces, advertising placements, signage, telephones and Tenant facilities, whether located inside the Place of Work or not, a
minimum of forty (40) days’ notice shall be provided to the GTAA Marketing & Commercial Development Department.

6 All salvageable Building components, equipment and other material removed as part of demolition requirements of the Construction shall be provided to the GTAA after careful removal, in accordance with an authorized salvage plan where specified by the GTAA.

7 Subject to the provisions of this Code, the Contractor will be permitted to use portions of existing Airport Lands for hauling equipment and materials or other operations, provided such use does not interfere with or constitute hazards to aircraft operations or other Airport activities, and does not endanger or damage pavements, drainage systems, above and below ground structures, lighting, navigational equipment and any other placements.

8 Any such use or occupancy in Sentence 7.8.2.3(8) is subject to prior approval by the GTAA. Should it prove to be objectionable for any reason, the Contractor shall, at its expense, modify the arrangements to eliminate the objection.

7.8.2.4 GTAA Transportation Systems

1 People moving devices include; trains, busses, Automated People Mover (APM), conventional passenger elevators, escalators, walks and express walks. Refer to existing safety protocols found at www.torontopearson.com/en/operators-at-pearson/construction/contractor-activities including the Toronto Pearson Handbook for Business Partners and Working Near the Automated People Mover guidelines for more information.

2 People moving devices are meant for the use of passengers and Airport personnel travelling between Terminals, or to and from designated parking areas.

3 Such devices may be used for the general movement of Contractor personnel between designated parking areas and a Terminal.

4 Such devices shall not be used for the movement of Construction debris, tools, and equipment of any type, supplies or materials used for Work or Work-related activities. For these requirements Contractors shall only use freight elevators.

7.9 Special Procedures for Work in Terminals

7.9.1 General Requirements

1 Contractors shall contact the Service Delivery Coordinator for the Terminals, 3 business days prior to starting Construction in the Terminals, to obtain a Terminal Work Permit that provides specific requirements and procedures for the Project not mentioned in this Subsection.

7.9.2 System Shut-downs and Modifications

1 Contractors performing Construction at the Terminals and requiring shut downs of major systems, shall conform to the requirements of the GTAA Facilities Shut-down
Procedures Manual, and shall complete and submit the appropriate systems shut-down request form to the GTAA Facilities Maintenance Planning Department.

2 In addition to the above requirement, the Contractor shall complete and submit a Facilities Shut-down Request Form to the Maintenance Planning Department at least 5 business days in advance of the required shut-down.

3 On the day of the required shut-down, the Contractor shall report to the Maintenance Planning Department prior to commencing Work, to discuss the necessary arrangements for system shut down and start up with respect to the Contractor’s Work. The Contractor shall identify the nature of the Work, expected duration, and exact location. The Contractor shall identify all personnel to be involved in the Work, and where the Work is located in the Restricted/Critical Area such personnel shall produce for verification the required RAIC and escort and surveillance provisions. The Contractor shall not leave Place of Work until verified back in service by the GTAA Airport Operations Centre.

4 Modifications and additions to fire alarm systems as part of the Work by a Tenant shall be performed by the Tenant’s Contractor, with final testing and verification of the system performed by the GTAA designated Blanket Purchase Agreement (BPA) Contractor for fire alarm systems and paid for by the Tenant.

7.9.3 Surface Penetrations – Coring, Drilling, Chipping, & Cutting

1 The GTAA has established Surface Penetration Guidelines (SPG) and a Contractor Surface Penetration Checklist & Sign-offs form (CSPCS) which must be utilized for all Contractor Work which includes: coring, drilling, chipping, cutting, etc., of any concrete floor and/or wall with in GTAA-maintained facilities.

2 The SPG clearly details the roles and responsibilities of the Project owner, the General Contractor (GC), the Project Structural Engineer (PSE) and/or the Designated Structural Engineer (DSE), the Independent Construction Safety Consultants (ICSC), and the CCPO. Refer to the Surface Penetration Guidelines (SPG) and the Contractor Surface Penetration Checklist & Sign-offs form (CSPCS) available on the CCPO web page: www.torontopearson.com/en/operators-at-pearson/construction/contractor-activities

3 General guidelines for executing surface penetrations includes:

   a. All surface penetrations in any concrete floor or wall structure shall be kept to a minimum and shall be planned in accordance with the Surface Penetration Guidelines. Where possible, installations shall use existing penetrations.
   
   b. Prior to any surface penetrations commencing, the GC must confirm that all applicable reviews have been completed, all applicable reports are in hand and that the CSPCS form has been fully completed and signed by all the applicable parties including the GC, the structural engineer and by ICSC.

4 In any location where the public or Airport employees are present, the GC shall provide signage, barricades and spotters at the level of coring and at the area below the core. Core drills may also be subject to a pre-start inspection by the ICSC.
7.9.4 Service Room Access

1 Contractors performing Work requiring High Voltage (HV) Substation access will be permitted entry only by having GTAA Facilities Electrical Department unlock the HV locations, securing them at the completion of each shift, and securing them at the completion of the Work.

2 Where access to other mechanical or electrical service rooms is required, keys may be signed out to the Contractor from the GTAA Safety & Security Department after permission is granted from the GTAA room owner.

3 All keys must be returned upon completion of the Work. The requirements of Subsections 6.1.10.2, 6.1.10.3 and 6.1.11 of this Code will apply to lost or unreturned keys.

7.9.5 Roof Access

1 Contractors performing Work at the Terminals requiring access to roof areas will be permitted such access as described below, upon submission and authorization of a Roof Access Form:

   a. When accessing through an unguarded Primary Security Line door, approval must be obtained in advance, from the GTAA Corporate Safety and Security Department. The Roof Access Form must be submitted to the GTAA 72 hours in advance of the required access. On the day of the requested access, the GTAA Corporate Safety and Security Department must be notified prior to entering and upon exiting the Restricted Area. A GTAA-approved security guard must be stationed at the door while the Contractor is conducting Work on the roof if not in possession of a valid RAIC.

   b. When accessing a roof area outside the Primary Security Line, any normal route can be followed. A Roof Access Form must be submitted 72 hours in advance and authorized by the GTAA Corporate Safety and Security Department.

   c. Roof Access requests can be submitted on-line at: www.torontopearson.com/en/operators-at-pearson/construction/approvals/roof-access-request-form

7.9.6 Contractor Sign-in Policy for Terminal Buildings

1 All Contractors and subcontractors performing Work in or around a Terminal will be required to sign-in daily with the GTAA (via telephone) and the Contractor for the Project shall have:

   a. received a FAP orange placard with affixed validation number, and

   b. submitted a completed Toronto Pearson Construction Activity Request form to the Airport Construction Coordinator prior to the initial sign-in.

2 The Contractor sign-in telephone number is: (416) 776-3055. An operator is accessible 24 hours a day, 7 days per week including holidays.

3 The information to be provided at the time of sign-in includes:
a. the FAP Application Validation number (right lower corner of orange placard),
b. name of the Contractor or subcontractor(s),
c. number of personnel under direct supervision,
d. Work location(s), and
e. the Terminal Work Permit reference number.

4 Once this information has been received, the GTAA will provide an authorization number, which must be given to all personnel working within Buildings under the Contractor or sub-contractor’s direct supervision.

5 Contractors or sub-contractors who do not meet with the above requirements will not be permitted to sign-in or enter the Building. Additionally, any Contractor or sub-contractor who fails to sign-in daily or has disregarded any part of these requirements may be directed by the GTAA to stop Work and leave the Place of Work immediately.

6 At the end of each day, the Contractor or sub-contractor must sign out (via telephone) with the GTAA reporting the time that their personnel will be leaving the Building. Failing to complete this step may preclude the Contractor or sub-contractor from signing-in on the following day.

7.10 Coordinated Construction Process

7.10.1 Scope

7.10.1.1 Definitions

1 For the purposes of this Section, the following terms and definitions shall apply:

**GTAA Project Manager** means the Person designated by the GTAA who is responsible for the overall coordination of the Project, and who shall act as the principal liaison between the GTAA and the Consultants and Contractors.

**Operator** means the Person(s) assigned the duties related to maintaining or providing overall care and control of the Building or operational area and may be an occupier or Stakeholder of the same area.

**Activity Coordinator** means the person designated by the GTAA as a single point of contact between Stakeholders and the Contractor(s) performing Work. The Activity Coordinator shall oversee the implementation of Work related to new Construction, demolition, alteration, improvement or repair with respect to coordinating, scheduling and tracking of Persons engaged in such Work. The role of the Activity Coordinator may be filled by the respective Airport Construction Coordinator.

**Stakeholder** means Person(s) forming all or part of a user group who occupy, operate, maintain, and/or service a Building or operational area, and represent either the GTAA or a Tenant.
The limitations of Sentence (1) apply to the GTAA, any Contractor of the GTAA, any Tenant of the GTAA, and all other third-party Persons authorized directly or indirectly by the GTAA to be on Airport Lands for any duration of any Construction.

7.10.1.2 Application

1. A coordinated Construction process shall be considered for a Project that is large in scale and where Construction is to be implemented within, or adjacent to an occupied Building or operational area, or where Construction is determined to affect occupants or Airport operations. All Contractor(s) involved in such Construction shall communicate and coordinate with the Operator of the Building or operational area and its associated Stakeholders through the designated Activity Coordinator, by using a precise, scheduled approach to accomplish the Construction in a non-intrusive, safe and compliant manner.

2. The specific conditions for applying this process will be reviewed and determined by the Construction Compliance & Permits Office (CCPO) on a case-by-case basis and may be part of the requirements for issuing a Facility Alteration Permit (FAP).

3. Construction within operational areas shall be coordinated with the Airport Construction Coordinator.

4. Construction within a Terminal shall be coordinated with the Service Delivery Coordinator assigned to each individual Terminal.

5. Contractors shall comply with the Logistics Program for movement of materials and equipment within a Terminal.

7.10.2 Responsibilities and Duties

7.10.2.1 Operator

1. The Operator shall:
   a. designate a Person to assume the role of Activity Coordinator;
   b. attend the pre-Construction meeting when requested.

7.10.2.2 Activity Coordinator

1. The Activity Coordinator shall:
   a. attend the pre-Construction meeting when requested;
   b. be responsible for communicating and coordinating, with the relevant and affected Stakeholders using the Building, the intention of a Contractor to commence Construction within the Building;
   c. collect and analyse each Contractor’s two-week advanced schedule of planned Work and any other documentation provided to permit the Work to start;
   d. notify the Stakeholders and confirm their acceptance of each Contractor’s Work;
   e. track via the GTAA’s Activity Whiteboard the scheduled Work of all Contractors and Stakeholders for each day, and verify they are started and finished as planned.
7.10.2.3  **Construction Compliance & Permits Office (CCPO)**

1  The CCPO shall:

   a. provide notice to the Activity Coordinator when a FAP is issued requiring this approach;

   b. ensure a pre-Construction meeting is scheduled when applicable with the Contractor, Activity Coordinator and the Project Manager;

   c. oversee and monitor the conduct and activities of all Contractors and Stakeholders to appraise the specific requirements of the approach on the basis of achieving compliance with the Applicable Codes and Standards.

7.10.2.4  **GTAA Project Manager – GTAA Projects**

1  The GTAA Project Manager shall be responsible for the overall coordination of the Project and shall act as principal liaison between the GTAA and the Consultants and Contractors.

2  The GTAA Project Manager shall be responsible for monitoring the Contractor’s overall schedule during all stages and activities of the Work, and for providing information to the Consultant and/or Contractor concerning Terminal operations requirements.

3  The GTAA Project Manager shall ensure and monitor that the Contractor complies with all safety requirements and has his area secured for normal Terminal operations prior to commencing any Work.

7.10.2.5  **GTAA Project Manager – non-GTAA Projects**

1  The GTAA Project Manager in an advisory role shall be responsible for acting as principal liaison between the GTAA and the Project Consultants and/or Contractors.

2  The GTAA Project Manager shall provide information to the Project Consultants and/or Contractors concerning Airport operation requirements.

7.10.2.6  **Contractor**

1  Each Contractor and all subcontractors shall:

   a. attend the pre-Construction meeting prepared to discuss the first two weeks of the advanced schedule of planned Construction;

   b. provide the Activity Coordinator in the Building with a copy of the first two weeks advanced schedule of planned Work and revolving updates to the schedule on a weekly basis thereafter until all of the Work by each Contractor is completed;

   c. attend the Contractor/Stakeholder meetings as may be required and submit the required documentation prescribed by the Activity Coordinator for the Work related to the Construction scheduled to occur;

   d. ensure a Facility Alteration Permit placard with the validation number is posted at the Place of Work;
c. identify the location(s) of the Work and dependent areas, the Work description, and the provisions required from the GTAA to complete the Work (i.e. coordinate with the Building Operations Manager or Duty Manager to determine applicable requirements for):
   i. access permission to rooms,
   ii. Airport systems shut-downs, isolations, lock-outs and/or tie-ins,
   iii. security escorts,
   iv. material logistics, and
   v. scheduling of the Construction acceptable to Airport operations.

f. communicate and coordinate with other Contractors where there is conflict related to time and space that might have an alternative remedy if agreement can be reached. Constructor coordination protocols are to be developed by the affected Contractors, formally documented, and must address maintaining separation regarding:
   i. Security,
   ii. Access,
   iii. Material Movement,
   iv. Parking,
   v. Laydown Areas,
   vi. Work Schedules, and
   vii. Communication method.

This protocol may require notification to and approval from the Ontario Ministry of Labour (MOL). Refer to the MOL Constructor Guideline for more information: www.labour.gov.on.ca/english/hs/pubs/constructor.

g. arrive as scheduled at the Place of Work with all the necessary resources and equipment to perform the Work.

h. report to the GTAA Project Manager and the Activity Coordinator at the end of the work shift any outstanding Work that will need to be rescheduled.

7.10.2.7 Stakeholders

1 Each Stakeholder identified as being involved or impacted by any planned Construction shall, when requested by the Activity Coordinator:
   a. attend the pre-Construction meeting prepared to discuss the first two weeks of the advanced schedule of planned Construction;
   b. communicate and coordinate with Contractors where there is conflict related to time and space that might have an alternative remedy if agreement can be reached;
   c. pin-point activities of any related Stakeholder on the Area Drawing to the Activity Coordinator to establish the start confirmation for the next planned workday;
   d. report to the Activity Coordinator at the end of the Work shift any outstanding part of any Stakeholder activity that will need to be rescheduled.
8.1 General

8.1.1 Contract Requirements

1 Contractors performing Construction Airside shall conform to all applicable requirements of this Code, in addition to the requirements of the Airside Activity Program and this Section.

2 Non-Passenger Vehicle Screening (NPSv) is carried out by Canadian Air Transport Security Authority (CATSA) including verification of Restricted Area Identity Cards (RAICs), in addition to the regular inspection at the gate. Vehicles and the occupants will be screened separately when entering the Airside from the perimeter. CATSA guards will examine the vehicle, and the occupants and their belongings will go through a screening process like the NPS process in the Terminals. Contractors shall allow sufficient time in their daily work schedule for complying with these screening requirements.

3 All GTAA Construction within Airside shall be assigned a GTAA Project Manager. In addition, certain non-GTAA Construction within Airside may be assigned a GTAA Project Manager. Depending on the scope of the Work, the GTAA Project Manager may be a representative of GTAA Engineering.

4 Individual Contract Documents may contain further general restrictions, conditions, and observations particularly relevant to the Work of the Contract, in addition to those stipulated herein.

8.1.2 Role of the GTAA Project Manager—GTAA Projects

1 The GTAA Project Manager shall be responsible for the overall coordination of the Project and shall act as principal liaison between the GTAA and the Consultants and Contractors.

2 The GTAA Project Manager shall also be the principal liaison between the GTAA and Nav Canada, in conjunction with the Airside Construction Coordinator.
3 The GTAA Project Manager shall be responsible for monitoring the Contractor’s overall schedule during all stages and activities of the Work, and for providing information to the Consultant and/or Contractor concerning Airport operation requirements, in conjunction with the Airside Construction Coordinator.

4 The GTAA Project Manager shall verify and monitor that the Contractor is complying with all safety requirements and has the Place of Work secured for Airside operations prior to commencing any Work.

5 The GTAA Project Manager shall verify that all Contractors working Airside have received training on the Airside Activity Program and have been signed off on the training.

8.1.3 Role of the GTAA Project Manager—Non-GTAA Projects

1 The GTAA Project Manager, in an advisory role, shall be responsible for acting as principal liaison between the GTAA and the Project Consultants and Contractors.

2 The GTAA Project Manager shall also be the principal liaison between the GTAA and Nav Canada, in conjunction with the Airside Construction Coordinator.

3 The GTAA Project Manager shall provide information to the Consultant and Contractor concerning Airport operation requirements, in conjunction with the Airside Construction Coordinator.

8.1.4 Role of the Officer, Construction Security Planning

1 All Construction activities that touch, come close to or are in the Restricted, Critical and/or Sterile Areas of the Airport shall be coordinated through the Officer, Construction Security Planning who is responsible for: coordinating security related activities, Primary Security Line (PSL) movements, hoarding compliance and issuing Temporary Construction Passes.

8.1.5 Role of the Airside Construction Coordinator

1 All Construction activities within the PSL, other than within the Terminals, shall be coordinated through the office of the Airside Construction Coordinator. The Airside Construction Coordinator shall:
   a. coordinate and schedule Contractor access to Airside areas under Construction,
   b. coordinate and schedule all necessary infrastructure shutdowns,
   c. notify the Airport Operations Centre (AOC) of all Construction, when required.

2 Final authorization for Airside Work lies with the GTAA Aviation Programs, Compliance and Coordination Department through the Airside Construction Coordinator and Manager, Operations – Aviation Services.

8.1.6 Airport Operations

1 The Contractor shall not disrupt Airport operations in any way without the written permission of GTAA Engineering and the Airside Construction Coordinator. Anything
outside of the scope of Work approved by the Airside Construction Coordinator will not be approved.

2 All Airside Construction must be reviewed and approved by GTAA Engineering and the Airside Construction Coordinator. The Airport Operations Centre (AOC) must be notified in advance of all Airside Construction.

3 The Airside Construction Coordinator shall be contacted to obtain the required Activity Notice form(s) to be completed for any Work within Airside. Note that all applications submitted for Work within Airside must come from an assigned GTAA Project Manager and not the Contractor. The submission paperwork may be completed by the Contractor but must be submitted by the GTAA Project Manager to ensure submission is complete with all appropriate information.

4 The Contractor shall provide, maintain, and remove all temporary protection for the safe management of public, personnel, pedestrian and vehicular traffic in accordance with Book 7 of the Ontario Traffic Manual.

**8.1.7 Critical Area Operations**

1 When entering the Critical Area at a Critical Area access point all Contractors must have their RAIC validated by a guard and all AVOP and escort ratios must be adhered to.

2 All Temporary Security Control Pass holders must be presented to CATSA for mandatory screening.

3 When transiting between the Restricted Area and Critical Area everyone must attend a Critical Area access point for RAIC verification and screening.

4 Prior to displacement of the Critical Area Security Line contact the GTAA Corporate Safety and Security Department for authorization and requirements.

**8.2 Construction Vehicle Operation**

**8.2.1 Compliance Requirements**

1 The Contractor shall be responsible for adhering to any and all of the following procedures, rules and regulations as may be applicable to the Place of Work.

2 It is the responsibility of the Contractor to arrange at their expense for the necessary training and testing of their personnel that will be required to drive Airside. Details of GTAA’s Airside Vehicle Operators Permit Program can be found at https://www.torontopearson.com/en/airport-employees/passes-and-permits/airside-vehicle-operators-permits.

3 Refer to Part 6 of this Code for requirements of the Restricted Area security and access control procedures.

4 Personal vehicles of Consultants, Contractors, sub-contractors and suppliers shall be parked in the Contractor’s parking lot, or in other designated landside areas. Only vehicles required for the execution of the Work will be permitted Airside.
All vehicles accessing *Airside* must be approved, equipped, marked, and insured according to the terms of the AVOP Program. Personal vehicles are not permitted to drive or park *Airside* unless they have been modified to conform to the requirements of the AVOP program.

### 8.2.2 Airside Vehicle Operators Permit

#### 8.2.2.1 Issuing Requirements

1. Once authorized by the GTAA, *Persons* applying for an AVOP may obtain an AVOP application and study material through the Pass Permit Control Office.

2. *All Persons* applying for an AVOP shall complete the AVOP testing procedures set out in the AVOP Program.

3. The GTAA issues three types of AVOP permits; DA, GA/DA, and D. Each permit authorizes driving in specific areas of the Airport. The Airport Traffic Directives set out the definitions of these permits and is incorporated herein by reference.

4. The AVOP is issued under the authority of the *President and Chief Executive Officer* or his/her designated representative, who may rescind authorization to drive *Airside* for failure to comply with the Airport Traffic Directives.

5. All vehicles operating *Airside* shall be registered and licensed by the GTAA prior to operating *Airside*, unless they are under escort of a vehicle registered and licensed to operate *Airside*. New *Tenants* shall establish credentials and requirements to operate *Airside* by request in writing to the Manager, AVOP Program. Application forms are available at the GTAA Pass Permit Control Office.

6. *All vehicles* must be specifically insured to operate *Airside*. *Airside* insurance for *Contractors* may be arranged through the GTAA Risk Management Office.

7. Questions arising from the Airport Traffic Directives may be forwarded to the Manager, AVOP Program.

#### 8.2.2.2 Vehicle Operation Regulations

1. All vehicles with two-way radios approved to operate on the *Airside* manoeuvring area shall have GTAA assigned identification (Call Sign). Application forms are available by contacting the AVOP office at 416-776-2867 or avop@gtaa.com.

2. All drivers operating vehicles *Airside* shall be in possession of a valid *Restricted Area Identity Card (RAIC)*, a valid AVOP and a valid provincial driver’s license, or be escorted by a vehicle registered and licensed to operate *Airside*.

3. Escort services are provided by a designated GTAA authorized escort services agency for all GTAA Contractors. *Tenants* requiring escort services may also utilize this service or select other authorized companies providing this service. Contact the Senior Manager, Security Infrastructures for the list of companies available.

4. All “D” drivers responsible for escorting vehicles in the *Airside* manoeuvring area are required to familiarize themselves with the rules and regulations involving escorting vehicles in Chapter 3 of the Airport Traffic Directives AVOP DA section 3.6.8 page 39.
Airside Construction Requirements

5 All signals from the Air Traffic Control Tower must be obeyed immediately.

6 All vehicles operating on the Airside manoeuvring area shall have safety equipment and be equipped with an amber Beacon.

7 Comply with all speed limits for vehicles on Airside movement areas, as listed in Chapter 3 of the Airport Traffic Directives AVOP DA section 3.4 page 27.

8.3 Construction Operations

8.3.1 Airside Areas

8.3.1.1 Contractor’s Responsibilities

1 The Contractor must participate in mandatory training on the Airside Activity Program and follow all stipulations therein. Non-conformance of the Airside Activity Program will result in the Work approval being rescinded and the Contractor being removed from the Place of Work.

2 Before any large earth or turf turning activities begin Airside, the GTAA must be advised to have Wildlife Control Officers standing by to control wildlife that can be attracted by such activity (birds looking for worms, etc.). Also, no fruit-bearing trees or vegetation are to be used in any landscape design.

3 Airport operational restrictions may affect the scheduling of the Work. Any Construction that may interfere with aircraft operations on the runways, taxiways and aprons shall be scheduled during periods when these operating surfaces are not in service as arranged by the GTAA Project Manager and the Airside Construction Coordinator.

4 The Contractor shall comply with all operational, safety, security, and other applicable requirements in the execution of the Work including when performing tasks near live runways, taxiways and aprons.

5 The Contractor shall always maintain, the integrity of all electronic and visual navigational aids associated with live aviation activities on Airside areas for aircraft operations, which take precedence over Construction operations.

6 Construction operations and equipment shall not impair the visual acuity or line-of-sight of air traffic controllers operating from the Air Traffic Control Tower, or the Airport Surface Detection Equipment (ASDE). Construction operations will be authorized by the Aviation Programs, Compliance and Coordination Department through the Airside Construction Coordinator.

7 Physical and visual impediments to apron, runway, and taxiway operations shall be avoided when manoeuvring surfaces are in service. These include but are not limited to the following:

a. Physical intrusions, such as cranes, backhoes, scrapers, trucks, bulldozers, stockpiled materials, etc., must comply with Obstacle Limitation Surfaces (OLS) in both horizontal and vertical directions.
b. Excavated surplus overburden stored at the **Place of Work** must be placed in areas and to heights directed by the **GTAA Project Manager**, through the **Airside Construction Coordinator**.

c. Other visual impediments such as reflective glare, fixed objects or excessive airborne dust, smoke, and/or steam must not interfere with the line of sight from the Air Traffic Control Tower to airfield operations, or the electronic equipment for aircraft navigation.

8 Unavoidable violations during the **Work** must be authorized by the Aviation Programs, Compliance and Coordination Department and the **Airside Construction Coordinator**. Authorized physical intrusions shall have their highest points marked by red obstruction lights.

9 **All use of cranes or aerial devices during Construction** shall be coordinated with **GTAA Aviation Services** in accordance with Article 7.6.15.7 of this **Code**.

10 **Cranes and other Construction equipment** cannot penetrate the Obstruction Limitation Surfaces (OLS) without prior authorization from the **Airport Operations Centre (AOC)**, shall be lowered during hours of darkness, and must be equipped with obstruction lighting in accordance with current **GTAA regulations**.

11 Open flames and inflammable fuels required for the execution of the **Work** are permitted on **Airside** areas only when authorized by **GTAA Fire and Emergency Services (F&ES)**, and after the **Contractor** has obtained a Fire Safety Work Permit from F&ES. Refer to Section 7.6 of this **Code**.

12 **Construction** involving the use and operation of any type of asphalt and/or tar kettle shall be restricted on roof areas where directly adjacent to, or overhead of ramp and apron areas as follows:

   a. **Contractors** are required to establish their own **Hot Work Permit Process** and to contact **GTAA Fire Prevention** to discuss potential fire hazards and general fire safety issues prior to placing such kettles. Refer to Fire Safety Work Permit Requirements in Subsection 7.6.2 of this **Code**.

   b. Kettles shall be placed in such a manner that airborne smoke and odour will not interfere with **Airport operations**, nor bring discomfort to airline staff and/or passengers.

   c. Where smoke causes a visual impairment to **Airport operations** or where airborne smoke and odour causes discomfort to airline staff and/or passengers, the **Contractor** will be required to remove the kettle and/or delay roofing operations until conditions improve.

   d. Tar kettle operations shall be conducted in safe locations away from **Building air intake louvers**, fuelling operations and flammable liquids and materials as reviewed by the **GTAA**.

13 All underground services and **Structures** near any **Airside Construction** areas shall be located, identified, and protected prior to any excavation. The **Contractor** shall be responsible for arranging with **GTAA’s Independent Utility Locating Contractor (IULC)** to provide such locates in accordance with the Utility Damage Prevention Program described in Part 7 of this **Code**.
14 The Contractor shall comply with both the Equipment Lockout for Construction and Systems Shut-down Procedures described in Part 7 of this Code.

15 Emergency Services mobility shall always be preserved. Response routes shall be reviewed by the GTAA Project Manager and the Airside Construction Coordinator on a predetermined regular basis to ensure that access is always maintained. Alternative and authorized routes shall be established if Construction is anticipated to interfere with such access.

16 Low visibility manoeuvring areas must be made sterile prior to the Airport commencing Low Visibility Operations. When “low visibility operations” are in effect, all Construction in these affected areas must stop and equipment and personnel must leave the affected area immediately. It is the Contractor’s responsibility to confirm with the GTAA Project Manager and Airside operations what areas will be affected and coordinate its schedule prior to commencement of Construction with the Airside Construction Coordinator;

17 The Contractor shall provide prior notification to the GTAA Corporate Safety and Security Department, GTAA Engineering and the Airside Construction Coordinator regarding any changes to the Primary Security Line and/or any related barriers, partitions, doors, security equipment, hardware, and signage, as well as impacts on Clear Zones.

8.3.1.2 Parking of Equipment and Stockpiling

1 Parking of equipment and stockpiling of materials on Airside areas by the Contractor shall be in accordance with TP312 requirements and shall be authorized in advance by the Airside Construction Coordinator with the following restrictions and requirements:

   a. Do not park any equipment or stockpile any material on the extended centerline of an active runway.

   b. Do not park any equipment or stockpile any material within the minimum taxiway separation distance as per TP312 Chapter 3.

   c. Do not park any equipment or stockpile any material within any active runway transitional surfaces as per TP312 Chapter 4. All stockpiles and equipment storage are to be located ONLY in areas authorized by the Airside Construction Coordinator.

   d. Mark the highest projections of equipment and materials with red obstruction lights where determined by Airside operations.

2 Parking of equipment and stockpiling of materials on Airside areas must be reviewed and authorized by the Aviation Programs, Compliance and Coordination Department prior to commencing the Work.

8.3.1.3 Cleaning

1 In addition to the requirements stated under Part 7, the Contractor shall conduct cleaning and disposal operations to comply with Foreign Object Debris (FOD) free surfaces.
2 The Contractor shall always maintain at its cost adequate sweepers at the Place of Work to keep all runways, taxiways, aprons, aircraft exit crossings and Airside service roads clean from Construction related debris. As required, sweepers should utilize water to make sweeping effective and not circulate dust and dirt.

3 Failure to maintain surfaces clean will result in the GTAA carrying out such Work, and the resulting costs shall be the borne by the Contractor.

8.3.1.4 Trenching

1 On pavements open to aircraft traffic, the Contractor shall obtain permission from GTAA Engineering and the Airside Construction Coordinator to undertake trenching that cannot be completed, backfilled and sealed within one working day.

2 Open trenches are not allowed adjacent to operational runways or taxiways.

8.3.1.5 No Smoking Policy

1 The GTAA has designated Airside areas as NO SMOKING, except as permitted in authorized areas specified by the GTAA. This policy applies equally to all GTAA staff, Contractors and any Person accessing Airside areas.

2 Smoking in vehicles in Airside areas is not permitted.

3 The Contractor shall bring this policy to the attention of all their employees, subcontractors and suppliers who will be required to Work on Airside areas and shall strictly enforce this policy.

8.3.2 Unserviceable Airside Areas

1 The Contractor shall mark off all areas made unserviceable for aircraft caused by the Work or authorized by GTAA Engineering and the Airside Construction Coordinator, by installing temporary red lights, retro-reflective markers, barricades, barriers and cones, and/or delineators in accordance with TP312 standards and the Airside Activity Program. All installations shall conform to GTAA specifications and standard drawings.

2 Due to the possibility of jet blast or turbulence from aircraft, installations of lights and/or markers must be rigidly fixed and tied down, and all barricades, barriers, cones and delineators must be adequately weighed down or fixed by other acceptable means, authorized by the GTAA Project Manager and the Airside Construction Coordinator.

3 The Contractor shall be responsible for the maintenance and relocation of these temporary installations from time to time, and for their removal and repair of pavement surfaces acceptable to the GTAA Project Manager and the Airside Construction Coordinator.
8.3.3 Runway, Taxiway and Apron Construction Zones

8.3.3.1 General Requirements

1. Prior to commencing the Work, all runway, taxiway and apron Construction zones must be reviewed for specific requirements, restrictions, and schedules, and authorized by the Airside Construction Coordinator.

2. At the end of every closure, the Contractor shall clean all runways, taxiways and apron areas which have been affected by the Construction, by flushing the surfaces with water and sweeping them free of Foreign Object Debris (FOD). Also, all vehicles leaving the Place of Work must be inspected for loose items or items that may become loose in transit.

3. The Contractor shall coordinate final inspections with the Aviation Programs, Compliance and Coordination department to allow sufficient time for inspections, so that surfaces can be reopened at the specified time without delay. Surfaces will not be reopened until inspected and authorized by GTAA Field Maintenance and Aviation, Programs, Compliance and Coordination.

8.3.3.2 Apron Construction Zones

1. Work within apron Construction zones shall be coordinated with the Airside Construction Coordinator and the GTAA Project Manager after consultation with the Apron Management Unit to minimize interference with Airport operations.

2. Work within 42.5m of an aircraft stand taxi lane shall only be undertaken when authorized to do so by the Airside Construction Coordinator and the applicable lane closure or restriction has been put in place.

3. Work within apron Construction zones must also be reviewed and authorized by the applicable Airside Construction Coordinator and conveyed well in advance to applicable Tenants and Stakeholders.

8.3.3.3 Runway Construction Zones

1. The Contractor shall undertake Work in runway Construction zones as follows:
   a. Work within the runway strip shall only be undertaken when the runway is closed to air traffic;
   b. At the end of every closure, the Work shall be completed to at least the granular base course level and to a minimum distance of 90 m from the centerline;
   c. Any unpaved area of such granular base shall be stabilized with a well coated and bound asphalt tack coat application acceptable to the GTAA Project Manager and Airside operations;
   d. At the end of every closure, open excavations and sloping mounds are not allowed within an active runway strip. Beyond the active runway strip, any excavation that remains open, shall be shaped into a “bowl” with side slopes not exceeding a 4:1 horizontal distance to height ratio;
e. No object can project through an imaginary plane of an active runway transitional surface as per TP312 Chapter 4. At no point shall any Work occur in an area not authorized by the Airside Construction Coordinator or MO-AVS.

8.3.3.4 **Taxiway Construction Zones**

1. The Contractor shall undertake Work in taxiway Construction zones as follows:
   a. Work within 47.5 m from a taxiway centerline shall only be undertaken when authorized to do so by the Airside Construction Coordinator and the applicable lane closure or restriction has been put in place;
   b. At the end of every closure, Work shall be completed to at least 22 m from the affected taxiway centreline;
   c. Any unpaved area of such granular base shall be stabilized with a well coated and bound asphalt tack coat application acceptable to the GTAA Project Manager and in accordance with TP312 standards and the Airside Activity Program.

8.3.3.5 **Flagging Procedures for Construction Vehicles Crossing Taxiways**

1. Construction vehicles crossing taxiways shall conform to the GTAA procedure for Airside flagging during Construction.

2. Where Construction activities require vehicles and equipment to cross taxiways on a regular basis, the Contractor shall provide flag Person(s) and vehicles through a GTAA-approved security escort company currently operating at the Airport.

3. Construction vehicles shall be limited to their own route to and from Construction Place of Work while being flagged across taxiways.

4. The Contractor shall always maintain a mechanical sweeper on site while Construction operations are underway. The sweeper must always maintain taxiways free of Foreign Object Debris (FOD).

5. Construction vehicle operators must:
   a. be briefed on flagging procedures prior to entering Airside areas;
   b. ensure truck speeds do not exceed 40 km/h;
   c. always obey flag persons. If unsure of flagging procedures or restrictions, drivers shall stop and query the flag Person for permission to proceed;
   d. report any observed FOD to flag Persons for immediate clean-up; and
   e. report any vehicle malfunctions to flag Persons for immediate response by the Contractor and put out appropriate safety markers to alert other vehicles.
Technical Data Records

9.1 Scope

1. All Construction, however minor, must be captured and properly documented in accordance with the standards of the GTAA to allow the GTAA to compile and maintain up-to-date technical data for record and functional purposes.

2. The GTAA maintains records of all technical data, specifications, and drawings of Facilities. All drawings provided to the GTAA in digital files or hard copy media must adhere to the standards documented in the Greater Toronto Airports Authority CADD Standard Guide as published by the GTAA Engineering Data Department from time to time.

9.2 Submissions to GTAA

9.2.1 General Requirements

1. At the completion stage of the Work, complete technical records showing the final Construction shall be submitted to:
   a. For all Construction Projects, submissions shall be made directly to the CCPO to satisfy the requirements of the FAP and for the issuance of the final Occupancy/Use Permit.
   b. For GTAA Projects, submissions shall also be made directly to the GTAA Project Manager to satisfy the requirements of the Construction Contract with the GTAA.
   c. For Tenant Projects, submissions shall also be made directly to the Tenant Coordinator to satisfy the requirements of the Stakeholders Review Process.

9.2.1.1 Contractor’s Responsibilities

1. At Substantial Performance of the Contract, the Contractor shall submit As-Built Documents in accordance with the Contract, this Code and the Greater Toronto Airports Authority CADD Standard Guide.
2 The Contractor shall submit the As-Built Documents to the Consultant for review and comment, in accordance with the Contract, and shall make changes as per all noted amendments prior to submission to the GTAA.

9.2.1.2 Consultant’s Responsibilities
1 The Consultant shall review the As-Built Documents for general completeness and accuracy and shall note any and all deficiencies to the Contractor for amendment prior to their submission to the GTAA.
2 The Consultant shall then produce a complete set of Record Documents (Drawings and Specifications) in electronic format, in accordance with the Greater Toronto Airports Authority CADD Standard Guide for submission to the GTAA.
3 The Consultant shall also submit one printed copy of the Legal Documents (Construction Documents and Record Documents) to the GTAA for its records.

9.2.2 Submission Requirements
1 Construction Documents: shall be submitted to the GTAA by the Consultant in electronic file format (one PDF format and one native CADD format file for each drawing) at the commencement of Construction, and in printed format at the Final Acceptance stage of the Project as a component of the Legal Documents.
2 Contractor’s As-Built Documents: shall be submitted to the GTAA and where specified, to the prime Consultant by the Contractor in hardcopy (1) and softcopy (scanned PDF) format, at the Substantial Performance stage of the Project.
3 Consultant’s Record Documents: shall be submitted to the GTAA by the Consultant in electronic file format, (including one scanned or electronically generated PDF format file and one native CADD format file of each drawing together with one CADD format file meeting the standards laid out in the GTAA CADD Standard Guide per discipline, representing all changes imposed by Construction (Managed Dataset), and in printed format at the final acceptance stage of the Project as a component of the Legal Documents.

9.3 Operation and Maintenance Manuals

9.3.1 Scope
1 An organized compilation of operating and maintenance data shall be submitted by the Contractor to the GTAA as part of the requirements for determining Substantial Performance of the Contract.
2 Such data shall include but not be limited to detailed technical information, documents and records describing the operation and maintenance of individual products, equipment or systems, as specified in individual sections of the specifications, and as applicable to the scope of the Work.
9.3.2 General Requirements

1. Assemble, coordinate, bind and index required data into Operation and Maintenance Manuals.

2. Submit completed Operation and Maintenance Manuals to the GTAA within three months after reaching Substantial Performance of the Contract.

3. Submit the required number of copies in English as specified in the Contract.

4. Organize data into the same numerical order as the specifications.

5. Label each section with tabs protected with celluloid covers fastened to card paper dividing sheets.

6. Type all information.

7. Drawings, diagrams and manufacturers literature must be legible.

8. One legible, electronic copy (scanned or electronically generated – PDF format) of all O & M manuals inclusive of all contained drawings, illustrations and literature.

9. Follow all format requirements specified in the Contract Documents.

9.3.3 Shop Drawings

1. Bind as a separate volume of the Operations and Maintenance Manual, one complete set of reviewed final Shop Drawings and product data sheets.

2. One legible, electronic copy (scanned or electronically generated – PDF format) of each shop drawing and product data sheet assembled in a single indexed electronic file or as individual files with separate index file.

3. Follow all format requirements specified in the Contract Documents.

9.3.4 Warranties and Guarantees

1. Include original copies of all material, product and system warranty certificates duly signed and authorized by the appropriate manufacturers/suppliers for the periods specified by the Contract Documents.

2. Include original copies of all installation and quality of Work guarantees duly signed and authorized by officers of the company for the periods specified by the Contract Documents.

3. All warranties and guarantees provided for completed Work must include the company name, the contact person, their email address and phone number.
9.4 **GTAA’s Enterprise Asset Management (EAM) System (Maximo)**

### 9.4.1 Scope

1. The GTAA manages its Airport’s physical assets, parts/inventory and maintenance plans using an EAM system called Maximo (by IBM). Maximo is used by GTAA to deliver full Asset Life Cycle management as per the ISO55000 standard.

2. Maximo helps the GTAA realize industry best practices in relation to optimum planning, asset reliability, repair/replace decision making and maximizing the airport’s resources.

3. The Airport’s assets are classified as per the GTAA Asset Hierarchy Structure. Only assets listed in the hierarchy are required to be documented. Examples of these assets are: Mechanical systems, Electrical systems, Building Architecture. Please contact the GTAA Asset Management department (AMD) (Airport Development & Technical Services-ADTS) for a copy of the GTAA Asset Hierarchy Structure.

### 9.4.2 General Requirements

1. The Contractor shall work with the AMD in order to prepare an inventory for all applicable systems, structures and equipment in accordance with the Contract requirements, and GTAA Airport Development & Construction Department (AD&C) and the IT PMO’s guidelines. Electronic templates will be utilized to facilitate this process and will be provided by the AMD.

   The types of documentation required includes:
   
   a. Asset being Repurposed
   b. Asset being Decommissioned
   c. New Assets being Commissioned
   d. List of Spare Parts for new Assets

2. The Consultant and/or Contractor shall submit the required number of copies of these forms in the appropriate format to the GTAA as per agreed plan.

3. Submitted information will be reviewed by the Project team and applicable Functional Maintenance team for accuracy and completeness. Data validity will be reviewed by the AMD who will provide final approval of the submitted data. The data will then be incorporated into the EAM system by the AMD.

4. For further details refer to the GTAA Facilities SOP FM-0055 “Guide to Providing Data for Assets Requiring Maintenance”.

7.7.6.3 - Detail A – Hoarding Signage
7.7.6.4 - Detail B – Bilingual “Authorized Personnel Only” Signage

*Note: All Dimension in mm