



MWAA.COM

Your Journey Begins with Us



BUILDING CODES MANUAL

METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

BUILDING CODES MANUAL

Prepared by:

**MA-38
Office of Engineering
Building Codes / Environmental Department
Revised July 2018**

Table of Contents

Section

- 1.0 INTRODUCTION**
- 1.1 REFERENCED STANDARDS**
- 1.2 BUILDING CODES ORGANIZATION**
 - 1.2.1 Building Official**
 - 1.2.2 Building Codes/Environmental Department**
 - 1.2.3 Building Codes Plans Examiner**
 - 1.2.4 Building Codes Inspectors**
- 1.3 CONSTRUCTION PERMITS**
 - 1.3.1 Pre-Application Requirements**
 - 1.3.2 When Construction Permits are Required**
 - 1.3.3 Exceptions**
 - 1.3.4 Requirements for Construction Documents**
 - 1.3.5 Building Code Guidelines for Project Submittals**
 - 1.3.6 Application for Construction Permit**
 - 1.3.7 Review of Construction Documents**
 - 1.3.8 Approved Plans for Construction Permits**
 - 1.3.9 Review of Plans by Other Agencies**
 - 1.3.10 Issuing Construction Permits**
 - 1.3.11 Airport Work Permit in Lieu of Construction Permit**
 - 1.3.12 Third Party Plans Review**
 - 1.3.13 Third Party Structural Peer Review**
 - 1.3.14 Delegated Design**

- 1.4 BUILDING CODE INSPECTION**
 - 1.4.1 Minimum Inspections**
 - 1.4.2 Special Inspections**
 - 1.4.3 Inspection Notification by Permit Holder**
 - 1.4.4 Requests for Inspections**
 - 1.4.5 Inspections to be Prompt**
 - 1.4.6 Inspection of Fire Protection Systems**
 - 1.4.7 Interagency Inspections**
 - 1.4.8 Posting Buildings**
 - 1.4.9 Project Completion**
 - 1.4.10 Third Party Inspections**

- 1.5 CERTIFICATE OF OCCUPANCY**
 - 1.5.1 Temporary Use and Occupancy**
 - 1.5.2 Final Inspections**

- 1.6 ELEVATORS, ESCALATORS AND MOVING WALKS**
 - 1.6.1 Fire Protection for Elevators**
 - 1.6.2 Acceptance Testing**
 - 1.6.3 Certificate of Compliance**
 - 1.6.4 Posting Certificates of Compliance**
 - 1.6.5 Periodic Testing**
 - 1.6.6 Frequency of Tests and Inspections**
 - 1.6.7 Repairs and Alterations**
 - 1.6.8 Accidents Reported and Recorded**

- 1.7 Environmental**
 - 1.7.1 Stormwater Management Requirements**
 - 1.7.2 Asbestos Inspection Requirements**
 - 1.7.3 Hazardous Material Inspection and Clearance Requirements**
 - 1.7.4 CTO/CTC Requirements and Documentation**

APPENDICES

- APPENDIX 1 NOT USED**
- APPENDIX 2 NOT USED**
- APPENDIX 3 REQUIREMENTS FOR AUTOMATIC SPRINKLER SYSTEMS**
- APPENDIX 4 BUILDING CODE GUIDELINES FOR PROJECT SUBMITTALS**
- APPENDIX 5 APPLICATION FOR MWAACONSTRUCTION PERMIT**
- APPENDIX 6 CONSTRUCTION PERMIT**
- APPENDIX 7 AIRPORT WORK PERMITS**
- APPENDIX 8 NOT USED**
- APPENDIX 9 BUILDING CODE INSPECTION REPORT**
- APPENDIX 10 CERTIFICATE OF USE AND OCCUPANCY**
- APPENDIX 11 RESERVED**
- APPENDIX 12 RESERVED**
- APPENDIX 13 CERTIFICATE OF COMPLIANCE (ELEVATORS, ESCALATORS AND MOVING WALKS)**
- APPENDIX 14 SPECIAL INSPECTIONS FORMS/DATA SHEETS**
- APPENDIX 15 PERMIT APPLICATION CHECK LIST**
- APPENDIX 16 THIRD PARTY INSPECTIONS DATA SHEET**

1.0 INTRODUCTION

This Building Codes Manual describes and formalizes the policies and procedures implemented by the Metropolitan Washington Airports Authority to enforce the Virginia Uniform Statewide Building Code (USBC) for all construction projects at Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD) and Dulles Toll Road (DTR).

1.1 REFERENCED CODES AND STANDARDS

The applicable addition of the Uniform Statewide Building Code (USBC), as established by the State Board of Housing and Community Development, will be the governing code.

The following major subsidiary model codes are included by reference as part of the USBC:

- International Building Code (IBC)
- International Plumbing Code (IPC)
- International Mechanical Code (IMC)
- International Private Sewage Disposal Code
- ICC/ANSIA117.1, Accessible and Usable Building and Facilities
- International Energy Conservation Code
- NFPA 70, National Electrical Code (NEC)
- NFPA 13 Installation of Sprinkler Systems

1.2 BUILDING CODES ORGANIZATION

The Building Codes functions and lines of responsibility are described below.

1.2.1 Building Official

The Building Official is the Building Codes/Environmental Department Manager for Office of Engineering; they are responsible for enforcing the USBC on Authority property. The Building Official issues all Construction Permits. The Building Official signs Certificates of Occupancy for all applicable projects when they are satisfied that provisions of the USBC have been fulfilled. Only the Building Official may grant a modification to the USBC. In this manual, the term "Building Official" shall mean the Building Official or an authorized representative.

1.2.2 Building Codes/Environmental Department

The Building Codes/Environmental Department develops policies for the enforcement of the USBC and coordinates code concerns with other departments and offices of the Authority. The Building Codes Department reviews and issues all Construction Permits for all construction projects that are covered by the USBC.

1.2.3 Building Codes Plans Examiner

The Building Codes Plans Examiner oversees and monitors the daily operation of the Building Codes Department and maintains records that document all required plan reviews and construction inspections, in accordance with the USBC. The Building Codes Plans Examiner manages the elevator program and third party building code consultants.

1.2.4 Building Codes Inspectors

The Building Codes Inspectors conduct on-site building code inspections of the work in progress for compliance with the USBC and compliance with the Building Codes approved drawings. Inspectors are certified through the Commonwealth of Virginia, in their fields of expertise and may be certified in more than one discipline.

1.3 CONSTRUCTION PERMITS

1.3.1 Pre-Application Requirements

In the life cycle of a construction project, many events must transpire before a Construction Permit may be requested. All projects must be submitted in accordance with Authority requirements, as outlined in Order & Instruction 6-3-1C. The Airport Manager must accept the appropriateness of the project and the design of the project must comply with the Authority Design Manual, as well as the USBC. The O&I project procedures require more copies of project submittals and different reviews than the building code requirements. Often the Design Manual will require more stringent fire protection systems and construction features than the USBC. The Construction Permit applicant must also coordinate with:

- Office of Engineering for planning, aesthetics and proper signage,
- Utility Shops for compatibility and capacity,
- Fire Department for restrictions and operational issues, and
- Other related Agencies including those listed in Section 1.3.9, below.

The Building Codes Department is available for consultation during this pre-application period. For major projects, the Building Codes Department welcomes the opportunity to review the progress at significant stages of design to minimize changes to the final construction documents. After the construction documents have been successfully bid and a Construction Contractor identified, but before any construction starts, a Construction Permit must be obtained.

1.3.2 When Construction Permits Are Required

1.3.2.1 Constructing, enlarging, altering, repairing, or demolishing a building or structure

1.3.2.2 Changing the use of a building either within the same Use Group or to a different Use Group when the new use requires greater degrees of structural strength, fire protection, exit facilities, ventilation or sanitary provisions.

1.3.2.3 Installing or altering any equipment that is regulated by the USBC.

1.3.2.4 Removing or disturbing any asbestos containing materials during demolition, alteration, renovation of or additions to buildings or structures.

1.3.2.5 Installing, altering, removing or closing (either temporarily or permanently) any underground or aboveground storage tank.

1.3.3 Exceptions

1.3.3.1 Ordinary repairs, which do not involve any violation of the USBC, shall be exempt from this provision. Ordinary repairs shall not include the removal, addition or relocation of any wall or partition; or the removal or cutting of any structural beam or bearing support; or the removal, addition or relocation of any parts of a building affecting the means of egress or exit requirements. Ordinary repairs shall not include the removal, disturbance, encapsulation, or enclosure of any asbestos containing material. Ordinary repairs shall not include additions, alteration, replacement or relocation of the plumbing, mechanical, or electrical systems, or other work affecting public health or general safety. The term "ordinary repairs" shall mean the replacement of the following materials with like materials:

- Painting,
- Roofing when not exceeding 100 square feet of roof area,
- Glass when not located within specific human impact loads and hazardous locations as defined in Section 2406 of the USBC,
- Doors, except those in fire-rated wall assemblies or exit ways,
- Floor coverings and porch floorings,
- Repairs to plaster, interior tile work, and other wall coverings,
- Cabinets installed in residential occupancies, and
- Wiring and equipment operating at less than 50 volts,

1.3.3.2 A Construction Permit is not required to install wiring and equipment, which operates at less than 50 volts, provided the installation is not located in a noncombustible plenum, is not penetrating a fire-resistance rated assembly or is not part of any of the following systems;

- Fire Alarm
- Fire Detection
- Fire Suppression
- Smoke Control
- Elevator control
- Egress Control

1.3.3.3 Detached utility sheds 256 square feet or less in area and one story or less in height, when accessory to any Use Group building except, Use Groups H and F-1.

1.3.3.4 All tents and air-supported structures that cover an area of 900 square feet or less, including all connecting areas or spaces with a common means of egress or entrance and with an occupant load of 50 or less persons.

1.3.3.5 The Building Official may authorize work to commence pending receipt of written application.

1.3.4 Requirements for Construction Documents

Plans and specifications for projects shall provide a detailed description of the work, its location; the use of all parts of the building, and of all portions of the site not covered by the building, and such additional information as may be required by the Building Official.

Where applicable, include the following:

1.3.4.1 Site Plan. A site plan showing to scale the size and location of all the proposed new construction and all existing utilities and buildings on the site, distances from lot lines, the established street grades and the proposed finished grades. Indicate sedimentation and erosion controls, such as silt fences and vehicular mud traps. In the case of demolition, show treatment of utility lines.

1.3.4.2 Code Data Sheet. A Code Data sheet shall be included with the drawings that includes but is not limited to:

- An egress plan showing the number of exits required, the number of exits provided, the required width of exits, the width provided, the path of egress and the travel distance.
- Occupancy information stating the square footage, the type of occupancy and the number of occupants.
- Building information showing the Use Group, type of construction, total square footage of the building, square footage of each floor and the number of floors.
- Code information stating the code and version of the code to which the project was designed.
- Fire rated construction information with a drawing showing the location and rating of all fire rated construction.

1.3.4.3 Engineering Details. The Building Official may require adequate details of structural, mechanical, plumbing, and electrical work to be filed, including computations, stress diagrams and other essential technical data. All engineering plans and computations shall include the signature of a professional engineer or architect licensed in the Commonwealth of Virginia who is responsible for the design. For buildings more than two stories in height, indicate where floor penetrations will be made for pipes, wires, conduits, and other components of the electrical, mechanical, and plumbing systems. The plans shall show the material and methods for protecting such openings so as to maintain the required structural integrity, fire resistance ratings, and fire stopping affected by such penetrations.

1.3.4.4 NFPA 13 Systems. The USBC, through the adopted International Building Code, requires that where an automatic sprinkler system is required throughout a building, it shall be designed, installed and tested in accordance with NFPA Standard 13, "Standards for Fire Sprinkler Systems." NFPA Standard 13 lists specific requirements for shop drawings, to be submitted for approval, which are included as Appendix 3, "Requirements for Automatic Fire Sprinkler Systems."

1.3.5 Building Code Guidelines for Project Submittals

Construction projects vary from very simple interior remodeling to major new construction of detached buildings. In all cases, certain basic information is required to obtain a Construction Permit. Appendix 4, "Building Code Guidelines for Project Submittals," lists the essential data to be provided when applying for a Construction Permit.

1.3.6 Application for Construction Permit

All applications for Construction Permits shall be made in writing by the owner, lessee of the building or agent of either, including instances where tenants are allowed to do direct

contracting. Requests for Construction Permits must be submitted on "Application for MWAAC Construction Permit" (Appendix 5).

The permit application shall include a Permit Application Checklist (Appendix 15) and all the information requested on the check list.

A Construction Permit shall not be issued allowing a building to be renovated or demolished until the Building Codes Department receives certification from the Permit Applicant that the affected portions of the building have been inspected for the presence of asbestos by an individual license to perform such inspections pursuant to Section 54.1-503 of the Code of Virginia and that no asbestos-containing materials were found or that appropriate response actions will be undertaken in accordance with the requirements of the Clean Air Act, National Emission Standard for the Hazardous Air Pollutant (NESHAPS).

1.3.7 Review of Construction Documents

The Building Official shall examine all construction documents submitted with Construction Permit applications within a reasonable time after filing (usually 10 working days). If the plans or specifications do not conform to the requirements of the USBC and an agreement for a safe solution to the building code deficiencies cannot be reached, the Building Official shall send a letter to the Permit Applicant, through the Airport Manager, rejecting the construction documents, stating the reasons and citing the building code sections for the rejection. Where the plans contain major deficiencies, the plans examiners shall require that the plans be revised and resubmitted.

1.3.7.1 Minor Changes. Where minor changes to the plans are required, the plans examiners may recommend that a Construction Permit be issued with corrective action noted on approved plans. The Permit Applicant will then ensure that the project is constructed in accordance with the revised plans.

1.3.7.2 Partial Plans. The Building Official may issue a Construction Permit for the foundations or any other part of a building before the plans and specifications for the entire building have been submitted, provided adequate information and detailed statements have been filed, indicating compliance with the pertinent requirements of the USBC. All portions of partial plans submitted for approval shall be 100% complete. The holder of such a Construction Permit for the foundations or other part of a building may proceed with construction at the holder's risk, and without assurance that a Construction Permit for the entire building will be granted.

1.3.7.3 Phased Construction. Projects involving phased construction shall be issued one Construction Permit with subsequent amendments for each phase of the work, so long as all work is performed by the same General Contractor. If work is phased and multiple contracts are awarded, individual Construction Permits must be issued for each phase.

1.3.8 Approved Plans for Construction Permits

When the plans examiners have approved the construction documents, the Building Codes/Environmental Department Manager shall stamp "approved" on two sets of plans and shall sign the cover sheet of each set. One set of such approved plans shall be retained by the Building Codes Department. The other set shall be kept at the construction site, available for inspection by building code officials at all reasonable times.

1.3.9 Review of Plans by Other Agencies

Plans for restaurants, food/drink preparation facilities, waterline construction, sewer line construction and pump/haul sanitation systems require review by outside agencies, as specified below. It is the responsibility of the tenant or his agent to submit plans for such facilities to the appropriate agency for review prior to applying for a Construction Permit.

1.3.9.1 Local Food Service Facilities. Plans for food service facilities at Washington Dulles International Airport shall be submitted to the Loudoun County Department of Environmental Health or the Fairfax County Health Department for review, depending upon the geographical location of the facility. Plans for food service facilities at Ronald Reagan Washington National Airport shall be submitted to the Arlington County Environmental Health Bureau for review.

1.3.9.2 Interstate Food/Sanitation Facilities. Plans for food service facilities, potable water systems or sanitary disposal systems (tritulators) involved in inter-state commerce, shall be submitted to the U.S. Public Health Service, Food and Drug Administration.

1.3.9.3 Waterline construction. Any modification to the existing water works affecting capacity, hydraulic conditions, operating units, or the quality of the water, requires plans and specifications along with hydraulic calculations to be submitted to the Virginia Department of Health for review and approval.

1.3.9.4 Sewer line construction. Any modification to the existing public sewer system requires plans and specifications along with calculations to be submitted to the Virginia Department of Environmental Quality.

1.3.9.5 Pump/Haul Sanitation Systems. Pump and haul sewage disposal systems shall conform to the requirements of the International Private Sewage Disposal Code. Submit plans to the geographic county having jurisdiction.

1.3.10 Issuing Construction Permits

Upon approval of the construction documents, the Building Official will issue a Construction Permit (Appendix 6) and forward it to the Airport Manager or his designee. When the Project Manager is satisfied that all other required approvals have been obtained he will forward the Construction Permit to the Contractor. The signature of the Building Official or his authorized representative shall appear on every Construction Permit. A copy of the Construction Permit shall be kept in plain view on the construction site for public inspection until the work is completed. Preconstruction meeting is required prior to the start of construction.

1.3.11 Airport Work Permit in Lieu of Construction Permit

Engineering & Maintenance Departments at either Airport may require an "Airport Work Permit" (Appendix 7) for activities related to underground utilities, paving and other flat earthwork, and for projects listed above in "1.3.3 Exceptions." Airport Work Permits allow the Engineering & Maintenance Departments to control work on their respective airports, but are not a requirement of USBC. Written request to use an Airport Work Permit shall be submitted to the Building Code Official by the COTR for approval prior to beginning any work.

1.3.12 Third Party Plan Reviews

Third Party plan reviews for compliance with the requirements of the USBC may be allowed by the Building Codes Department to facilitate the review process. Third Party reviews shall be submitted to the Codes Department with an Application for MWAA Construction Permit. The Building Codes Department Plans Examiner will review the documents for completeness and forward them to the Building Codes Manager for signature.

The requirements for Third Party plan reviews are outlined below.

1.3.12.1 Plans Examiner Requirements

Persons performing plan reviews for the Building Codes Department must meet the following requirements. Only those persons meeting the qualifications below and approved by the Building Codes department will be allowed to perform code reviews. A list of approved Plans Examiners will be kept on file in the Building Codes Department. Each plans examiner must hold a valid and current license in the Commonwealth of Virginia as a professional engineer or a licensed architect. In addition, the licensed professional must hold an ICC certification for the disciplines in which they are performing code reviews (see table below). Professional engineers and licensed architects shall be licensed in accordance with the rules set forth by the Virginia DPOR. The licensing requirements may be obtained from the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects at 3600 West Broad Street, Richmond, VA 23230-4917.

Discipline	Certification
Building (IBC)	Licensed Professional + Building Plans Examiner
Mechanical	Licensed Professional + Mechanical Plans Examiner
Plumbing	Licensed Professional + Plumbing Plans Examiner
Electrical	Licensed Professional + Electrical Plans Examiner
Fire Protection	Licensed Professional + Fire Protection Plans
Structural	Licensed Professional + experience in Structural Peer Review

1.3.12.2 Deliverables

Each permit application shall include two sets of drawings, two sets of specifications, structural calculations, plumbing calculations, electrical calculations, mechanical calculations, energy conservation calculations, a Plans Review Record for each discipline, a letter from the Engineer of Record stating the Special Inspection requirements, a letter from the Engineer of Record stating the requirements for temporary bracing and a sealed list of drawings included in the project.

Each code review must be submitted with an appropriate plan review record and sealed by the licensed professional performing the code review. Each plans review record must include a statement that the plans and specifications have been reviewed for compliance with the Uniformed Statewide Building Code with no exceptions or with exceptions noted. The statement

shall include the project title, specific drawing numbers reviewed, the date of the drawings and any revisions included in the drawings.

Sample plan review records must be submitted to the Building Codes Department for approval prior to performing plan reviews. Plan review records will be kept on file in the Building Codes Department.

The Special Inspections letter shall include a statement from the Engineer of Record stating the specific special inspections required for the project in compliance with Section 1704 of the IBC. The Engineer of Record must seal the letter.

The temporary bracing letter shall include a statement from the Engineer of Record stating what type of temporary bracing is required for steel erection, excavation shoring, concrete forms or any other construction that will require temporary bracing. The Engineer of Record must seal the letter.

The list of drawings shall be sealed and include all drawings being used on the project, the date of the drawings and any revisions included in the drawings.

1.3.13 Third Party Structural Peer Review

For Projects of a major nature the owner will provide a Structural Peer Review of the building and structures with the permit application. For projects of a minor nature, the owner or his representative should inquire if a Structural Peer Review will be required.

1.3.13.1 Qualifications

Structural Peer Reviews must be conducted by or under the direction of a Professional Engineer licensed in the Commonwealth of Virginia with demonstrated expertise in the class of structure being reviewed.

1.3.13.2 Independent Third Party

The peer reviewer or firm must be an Independent Third Party. The peer reviewer's firm and its employees shall have no personal or economic interest in or involvement with the project, prior, during or after the peer review. Any such conflicts shall be immediately identified to the Building Department.

1.3.13.3. Scope of the Review

The peer reviewer shall prepare a report consistent with the level of care required of Professional Engineers in the Commonwealth of Virginia.

The report shall contain at a minimum the following:

- A.** A review of an itemized list of the codes and standards used in the structural design of the project and a list of all documents reviewed.
- B.** A review of the structural design criteria including loads and performance requirements.
- C.** A review of design criteria that may not be specified directly in codes and standards to include reports by specialty consultants such as geotechnical reports.
- D.** Verify that conditions at the site have been investigated appropriately and that the design is in accordance with those conditions.

- E.** Review all architectural and structural drawings in the project. Review mechanical and electrical drawings for seismic connections as may be required. This review shall contain the following:
1. All architectural and structural drawings are in conformance regarding load conditions and any conditions that may affect the structure.
 2. Review of the completeness of the structural drawings including all notes, materials, loadings and conditions.
 3. Review of conformance of the structure to the Virginia Construction Code.
- F.** A review of the structural design to include:
1. Review of design concepts and methods including lateral loads and methods of providing lateral stability.
 2. Review of computer programs utilized and the appropriateness of their application.
 3. Review of structural analysis used to determine member forces and performance requirements for wind deflection, snow loading of similar. This shall include an examination of computer input and output.
 4. Thorough review of all structural components and connections.
 5. Verify that the calculations documenting the structural design are complete.
- G.** The review shall contain the following statement:

“I (The peer reviewer) hereby certify that I have performed the peer review in accordance with the peer review requirements and the standard of care applicable to the performance of structural peer reviews on similar structures in the Commonwealth of Virginia. I have determined that the structural design is in substantial conformance with the Virginia Construction Code.”

Name

Virginia License Number and Seal

1.3.13.4 Changes to Design

If there are changes to the design during the construction process, these changes must be reviewed and acknowledged by the peer reviewer in a separate report.

1.3.14 Delegated Design

The Building Codes Department may allow the Engineer/Architect of Record (EOR) to defer the design of a specific element or system to the submittal phase of the project and delegate the design to the contractor provided all of the following conditions are met:

1. Overall project design is the sole responsibility of the Architect/Engineer of Record (EOR). The use of Delegated Design does not abrogate that responsibility.
2. Delegated Design is agreed to by the Owner or his representative. For Authority Capital Projects, that is the Vice President, Office of Engineering or his representative. Delegated Design must also be specifically allowed for in the Authority A/E and Construction Contracts.

3. Delegated Design of any item shall have the approval of the Chief Building Official (CBO) or his representative.
4. The EOR shall provide a consolidated list of Delegated Designs on the title sheet, or other prominent location of the design documents for review by the Building Codes Department.
5. Delegated Designs shall be required to bear the seal and signature of the Virginia Registered Design Professional (RDP) responsible for their design.
6. Delegated Design documents shall be submitted to the EOR, who shall review them and forward them to the Building Codes Department, via the Authority Project Manager, with a notation indicating that the Delegated Design documents have been reviewed and found to be in conformance to the project design.

The Delegated Design elements will then be incorporated into the Construction Permit Plans, via a Notice of Design Change, Design Clarification or other amendment to the permit.

1.4 BUILDING CODE INSPECTIONS

The Building Official or his authorized representatives may inspect buildings for the purpose of enforcing the USBC, in accordance with the authority granted by Paragraph 36-105 of the Code of Virginia. Any building may be inspected at any time before completion and may be re-inspected when deemed necessary to enforce the provisions of the USBC.

1.4.1 Minimum Inspections

Inspections shall include but are not limited to the following:

- Inspection of footing excavations and reinforcement materials for concrete footings prior to the placement of concrete,
- Inspection of foundation systems during all phases of construction necessary to assure compliance with the code,
- Inspection of preparatory work prior to the placement of concrete,
- Inspection of structural members and fasteners prior to concealment,
- Inspection of electrical, mechanical and plumbing materials and systems prior to concealment,
- Inspection of energy conservation material prior to concealment,
- Upon completion of the building or structure, and before issuance of the Certificate of Occupancy, a final inspection shall be made and approved. All violations of the approved *construction* documents and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

1.4.2 Special Inspections

The owner shall employ one or more special inspectors to provide special inspections during construction on types of work as described in USBC Section 1704. These Special Inspections shall be conducted on work including at a minimum certain steel construction, concrete construction, prepared fill and pile foundations.

1.4.2.1 The requirement for Special Inspections shall be identified on the Application for Construction Permit. The Special Inspectors shall be provided by the owner and shall be

qualified and approved by the Commonwealth of Virginia for the inspection of the work described in the construction documents. Information for Special Inspectors and Testing shall be documented on the forms included as Appendix 14, as applicable and shall be submitted with the permit application.

All Special Inspection reports must be sealed by the Engineer in Responsible Charge.

1.4.2.2 The owner shall schedule the Special Inspections, shall document that the Special Inspections have been accomplished in accordance with the USBC, and shall furnish sealed reports to the Building Codes Department and to the Engineer of Record on a regular basis. A final summary letter shall be submitted to the Building Codes Department at the completion of the project.

1.4.3 Inspection Notification by Permit Holder

It is the responsibility of the owner/contractor to notify the Building Official when the stages of construction are reached that requires an inspection under Paragraph 1.4.1, above, and for other inspections as directed by the Building Official. The Permit Holder shall provide all ladders, scaffolds, test equipment and special tools required to complete an inspection or test.

1.4.4 Requests for Inspections

Requests for building code inspections shall be made by the Contractor to the Building Code Department. Requests for Code inspections shall be sent electronically to the Building Codes Department via the Internet. Go to www.mwaa.com, click on Business, click on Construction, then click on Building Code Department, select Building Code Inspection Request form, fill in appropriate information and click on submit. Requests should be made 24 hours in advance of the desired inspection date.

1.4.5 Inspections to Be Prompt

The Building Code Department will respond to inspection requests without unreasonable delay, typically within 2 working days. The Building Codes Department or their authorized representatives, which may include an approved third party, will perform all building code compliance inspections. The building code inspector shall give written notice that work is approved or rejected, to the Permit Holder or the agent in charge of the work. A "Building Code Inspection Report" (Appendix 9) will be used to document all code inspections. Defects shall be corrected and the area re-inspected before any work proceeds that would conceal the required corrections.

1.4.6 Inspection of Fire Protection Systems

The inspection and testing of all building code required components of Fire Protection Systems (including sprinklers, alarms, smoke detectors, and signaling devices) that are installed or altered under a Construction Permit shall be requested through the Building Codes Department. This includes all close-in inspections and acceptance tests. A Building Codes inspector shall witness all building code required tests, performed by the contractor or his agent, including hydrostatic testing of fire lines and backflow preventers. These tests and inspections shall not be conducted unless the approved submittals and plans as required by NFPA are present at the site. Test reports shall be submitted on approved forms within 30 days of test completion.

The Utilities Branch and the Fire Department at each Airport must approve utility outages and deactivation of fire alarm systems, in advance.

1.4.7 Interagency Inspections

Inspections may be required by outside agencies including those listed in 1.3.9 above. All new boilers and pressure vessels must be inspected by the Virginia Department of Labor and Industry, who will issue a Certificate of Inspection upon approval. See 1.6 below for elevator requirements.

1.4.8 Posting Buildings

Prior to its use, every room or space that is assembly occupancy with an occupant load of fifty or more shall have the occupant load of the room or space posted by the tenant with a sign approved by the Building Official. It shall be securely fastened to the building and be readily visible. The owner shall be responsible for installing and maintaining such signs.

1.4.9 Project Completion

At the successful completion of a construction project, the responsible building code official shall sign either a "Final Inspection Report" and/or issue a Certificate of Use and Occupancy (Appendix 10) .

1.4.10 Third Party Inspection Requirements

Persons performing Third Party Inspections for the Building Codes Department must meet the following requirements. Only those persons meeting the qualifications below and approved by the Building Codes department will be allowed to perform code inspections. Third Party Inspectors must be approved by the Building Department prior to performing inspections. The Third Party Inspections firm and the inspectors shall be submitted to the Building Codes Department for Approval using Appendix 16.

Persons performing inspections shall be under the direct control and supervision of a Professional Engineer in Responsible Charge (E.R.C.). The professional engineer must hold a valid and current license in the Commonwealth of Virginia as a professional engineer.

"Direct control and personal supervision," shall be that degree of supervision by a person overseeing the work of another whereby the supervisor has both control over and detailed professional knowledge of the work prepared under his supervision and words and phrases of similar import mean that the professional shall have control over the decisions on technical matters of policy and design, and exercises his professional judgment in all professional matters that are embodied in the work and the drawings, specifications, or other documents involved in the work; and the professional has exercised critical examination and evaluation of a(n) employee's work product, during and after preparation, for purposes of compliance with applicable laws, codes, ordinances, regulations and usual and customary standards of care pertaining to professional practice. Further, it is that degree of control a professional is required to maintain over decisions made personally or by others over which the professional exercises direct control and personal supervision

1.4.10.1 Professional engineers shall be licensed in accordance with the rules set forth by the Virginia DPOR. The licensing requirements may be obtained from the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects at 3600 West Broad Street, Richmond, VA 23230-4917.

1.4.10.2 Inspectors shall be certified by the Virginia Department of Community Housing and Development (DHCD) or the International Code Council (ICC) in each technical area they are inspecting, such as but not limited to, plumbing, electrical, mechanical, or building general. Individuals may be certified by the DHCD or ICC in more than one technical area.

1.4.10.3 The Third Party inspector shall complete written inspection reports for each inspection and provide the reports on a timely basis to the Building Code Official or his authorized representative. The inspection form shall be submitted to the Building Codes Department for approval.

Each report shall include but is not limited to the following:

- Description each type of inspection performed
- Indicate applicable locations and areas inspected
- The date and time of each inspection
- The permit number and project title
- Each report shall include the signature of the inspector
- Each report shall be sealed by the (E.R.C.)
- Report shall indicate approval or rejection.

Inspection Reports shall be forwarded to:
The Metropolitan Washington Airports Authority
Ronald Reagan Washington National Airport
Room 155 West Building
Washington, DC 20001
Attn. Thomas R. Beatty, CBO

1.5 CERTIFICATE OF OCCUPANCY

Any building or structure constructed under the USBC shall not be used until; a "Certificate of Use and Occupancy" (Appendix 10) has been issued by the Building Official.

1.5.1 Temporary Use and Occupancy

The holder of a permit may request the Building Official to issue a Temporary Certificate of Occupancy for a building, or part thereof, before the entire work covered by the Construction Permit has been completed. The Temporary Certificate of Occupancy may be issued provided the Building Official determines that such portion or portions may be occupied safely prior to full completion of the building.

1.5.1.1 The Permit Holder shall request a Temporary Certificate of Occupancy from the Building Official. The minimum information required is:

- Area of the building to be considered for temporary use,
- The time period of the temporary use,
- Circumstances that justify temporary use,

- Provisions to ensure the safety of occupants during temporary use, and
- Potable Water Test, where applicable.

Requests for temporary use shall be submitted a minimum of two calendar weeks prior to the proposed occupancy, for review and evaluation.

1.5.1.2 The Building Official will not issue a Temporary Certificate of Occupancy if any of the following conditions exist:

- An improper means of egress. This shall include incomplete fire rated assemblies, stairs, exits, and emergency lighting.
- Incomplete building code required fire protection systems. Fire protection systems that are not required by USBC may be accepted in an incomplete form if they do not present a hazard.
- Incomplete electrical system serving the area to be occupied and the standby power system for the building. The electrical system and standby power system must be completed, tested and approved.
- Incomplete HVAC system serving the area to be occupied. The heating, ventilation and air conditioning system must be completed and approved.
- Incomplete Plumbing system serving the area to be occupied. All plumbing serving the proposed area to be occupied must be completed, tested, and approved.
- Structural conditions that may create a hazard to the occupants.

Within two calendar weeks of the expiration date of a Temporary Certificate of Occupancy, the owner shall request a final Certificate of Occupancy or an extension of the Temporary Certificate of Occupancy. In order for a final Certificate of Occupancy to be issued, the conditions that restricted approval to a Temporary Certificate of Occupancy must be corrected.

1.5.1.3 If a Temporary Certificate of Occupancy expires without resolving its restrictive conditions, the Building Codes Department will prepare a letter from the Building Official to the owner requesting that they show cause for their non-compliance with the terms of their Temporary Certificate of Occupancy. If a satisfactory response is not received, the Building Official will refer the issue to the Authority's Legal Counsel for action.

1.5.2 Final Inspections

A "Final Inspections Report" (Appendix 9) shall be used to complete the inspection and acceptance process for all projects where a Certificate of Occupancy is not required by the USBC. The Building Codes Inspector(s) will complete this form for inclusion in the permanent files.

1.6 ELEVATORS, ESCALATORS AND MOVING WALKS

All elevators, escalators and moving walks shall be designed and installed in accordance with the latest edition of the American Society of Mechanical Engineers (ASME) Standard A17.1, "Safety Code for Elevators and Escalators."

1.6.1 Fire Protection for Elevators

Automatic fire suppression systems for elevators shall be designed in accordance with NFPA 13. Automatic fire detection system shall be designed in accordance with NFPA 72 and ASME A17.1.

1.6.2 Acceptance Testing

All new equipment shall be tested and inspected prior to start up by an approved independent third party, provided by the Permit Holder. The inspector shall be ASME QEI-1 certified, and a copy of the credentials shall be provided to the Building Codes Department. It is the responsibility of the owner to ensure that all acceptance inspections are scheduled and coordinated with the Building Codes Department, so that a Codes inspector can witness all acceptance tests and inspections.

1.6.3 Certificate of Compliance

The Building Official shall issue a "Certificate of Compliance" (Appendix 13) for all elevators, escalators, and moving walks that meet the requirements of ASME A17.1.

1.6.4 Posting Certificates of Compliance

The party responsible for elevators, escalators and moving walks shall post the last-issued Certificate of Compliance in a conspicuous place available to the Building Official.

1.6.5 Periodic Testing

Periodic testing is required on all elevators, escalators and moving walks to ensure their safety and ability to carry the capacity intended. These tests shall be performed by an approved inspector acceptable to the Building Official at the expense of the party responsible for the equipment.

1.6.6 Frequency of Tests and Inspections

The Authority has adopted the requirements for periodic testing specified in ASME A17.1.

1.6.7 Repairs and Alterations

The party responsible for the equipment shall have 30 days to take corrective action on repairs and modifications identified in the periodic inspection reports. He shall furnish evidence of satisfactory compliance by means of re-inspection reports.

1.6.8 Accidents Reported and Recorded

The *owner* of the building shall immediately notify the code official of every accident involving personal injury or damage to apparatus on, about, or in connection with any equipment covered by this chapter, and shall afford the code official every facility for investigating such accident. When an accident involves the failure, breakage, damage or destruction or any part of the apparatus or mechanism, it shall be unlawful to use such device until after an examination by a third-party inspector is made and approval of the equipment for continued use is granted by the Code Official.

1.7 Environmental

1.7.1 Stormwater Management Requirements

For erosion and sediment control and stormwater management requirements, the contractor shall reference the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act, under the Code of Virginia, Title 62.1, Chapter 3.1, Article 2.3.

1.7.2 Asbestos Inspection Requirements

Listed below is information clarifying the asbestos inspection requirements when obtaining a Construction Permit, Airport Work Permit or other construction during demolition and renovations activities on Authority property. Please review your projects and plan for adequate scoping during the design process. These regulations apply to all buildings regardless of when they were constructed.

Asbestos Inspection Background

Air toxics regulations under the Clean Air Act specify work practices for asbestos to be followed during demolitions and renovations of all facilities, including, but not limited to, structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). The regulations require a thorough inspection where the demolition or renovation operation will occur. The regulations require the owner or the operator of the renovation or demolition operation to notify the appropriate delegated entity (often a state agency) before any demolition, or before any renovations of buildings that contain a certain threshold amount of regulated asbestos-containing material. The rule requires work practice standards that control asbestos emissions. Work practices often involve removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable, as the regulation explains in greater detail.

Therefore, to ensure that the Authority is compliant with the regulations, the following will be a project requirement before a Construction or Airport Work Permits will be issued.

Authority Asbestos Inspection Requirements

All renovation/demolition projects will require proof of an asbestos survey (completed by a qualified agency) and proper notification to the EPA prior to the issuance of a building permit from the Building Codes/Environmental Department or an Airport Work permit. In accordance with 40 CFR Part 61 the National Emission Standards for Hazardous Air Pollutants (NESHAP) under Subpart M, owners or operators of a demolition or renovation activity and prior to the commencement of the demolition or renovation will thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos.

The inspection of facilities, regardless of the age of the building, is required since products containing asbestos have not been completely banned for use or import in the U.S. In fact, the following common consumer products are still approved for use in the U.S. and may have ACM:

- vinyl-asbestos floor tile;
- roofing felt and coatings;
- asbestos-cement products (corrugated and flat sheets, shingles, pipe);

- asbestos clothing;
- pipeline wrap;
- gaskets;
- millboard;
- non-roofing coatings;
- automotive products

In addition to the inspection requirement, the EPA requires a 10 working day notification prior to the start of a demolition project regardless if asbestos containing materials are present. (The EPA notification is only required for renovation projects in which a load-supporting structural members are removed, or if the renovation project will disturb greater than or equal to 260 LF, 160 SF, or 35 CF of regulated asbestos containing materials.)

Link to EPA NESHAP requirements:

<https://www.epa.gov/asbestos/asbestos-national-emissions-standard-hazardous-air-pollutants-neshap#ren>

Link to the notification form through Virginia Department of Labor and Industry:

http://www.doli.virginia.gov/leadasbestos/leadasbestos_forms.html

1.7.3 Hazardous Material Inspection and Clearance Requirements

An abatement area shall not be reoccupied until approved the building official which will require certification that the response actions have been completed and final clearances have been measured. The final clearance levels for reoccupancy of the abatement area shall be 0.01 or fewer asbestos fibers per cubic centimeter if determined by Phase Contrast Microscopy analysis (PCM) or 70 or fewer structures per square millimeter if determined by Transmission Electron Microscopy analysis (TEM). All inspections, project designs, and project monitoring sampling activities shall be conducted by individuals holding current Virginia Asbestos Inspector, Virginia Project Designer and Virginia Project Monitor licenses.

1.7.4 CTO/CTC Requirements and Documentation

Prior to beginning any work involving pump stations at Ronald Reagan Washington National Airport and Washington Dulles International, the VDEQ CTC (certificate to construct) shall be submitted to and approved by the Building Codes Department. Any requirements set forth in the CTC permit shall be incorporated into the project. Prior to placing the pump station into operation the contractor shall submit the CTO (certificate to operate) issued by the VDEQ, to the Building Codes Department for approval.

Prior to beginning any work involving new waterline at Ronald Reagan Washington National Airport and Washington Dulles International, the VDH CTC (certificate to construct) shall be submitted to and approved by the Building Codes Department. Any requirements set forth in the CTC permit shall be incorporated into the project. Prior to placing the new waterline into operation the contractor shall submit the CTO (certificate to operate) issued by the VDH, to the Building Codes Department for approval.

APPENDIX 3

REQUIREMENTS FOR AUTOMATIC SPRINKLER SYSTEMS

REQUIREMENTS FOR AUTOMATIC FIRE SPRINKLER SYSTEMS

Automatic Fire Sprinkler Systems shall be designed and installed in accordance with NFPA 13, "Installation of Sprinkler Systems." The following is excerpted from NFPA 13, and lists the requirements of plans submitted for approval.

6-1 Working Plans.

6-1.1 Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed or remodeled. Deviation from approved plans will require permission of the authority having jurisdiction.

6-1.1.1 Working plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following list that pertain to the design of the system. All plans submitted to the Building Codes Department shall be sealed by a licensed professional properly licensed in the Commonwealth of Virginia.

- (a) Name of the owner and occupant.
- (b) Location, including street address.
- (c) Point of compass.
- (d) Full height cross-section, or schematic diagram, if required for clarity; including ceiling construction and method of protection for nonmetallic piping.
- (e) Location of partitions including room dimensions.
- (f) Location of firewalls.
- (g) Occupancy class of each area or room.
- (h) Location and size of concealed spaces, closets, attics, and bathrooms.
- (i) Any small enclosures in which no sprinklers are to be installed.
- (j) Size of city main in street and whether dead-end or circulating; and, if dead-end, direction and distance to nearest circulating main, city main test results and system elevation relative to test hydrant.
- (k) Other sources of water supply, with pressure or elevation.
- (l) Make, type, and nominal orifice size of sprinkler.
- (m) Temperature rating and location of high-temperature sprinklers.
- (n) Total area protected by each system on each floor.
- (o) Number of sprinklers on each riser per floor.
- (p) Total number of sprinklers on each dry pipe system, pre-action system, combined dry pipe-pre-action system, or deluge system.
- (q) Approximate capacity in gallons of each dry pipe system.
- (r) Pipe type and schedule of wall thickness.
- (s) Nominal pipe size and cutting lengths of pipe (or center-to-center dimensions).
NOTE. Where typical branch lines prevail, it will be necessary to size only one typical line.
- (t) Location and size of riser nipples.
- (u) Type of fittings and joints and location of all welds and bends. The contractor shall specify on drawing any sections to be shop welded and the type of fittings or formations to be used.
- (v) Type and location of hangars, sleeves, braces, and methods of securing sprinklers when applicable.
- (w) All control valves, check valves, drain pipes, and test connections.

Requirements for Automatic Fire Sprinkler Systems Page 2

- (x) Make, type, model, and size of alarm or dry pipe valve.
- (y) Make, type, model, and size of pre-action or deluge valve.
- (z) Kind and location of alarm bells.
- (aa) Size and location of hose outlets, hand hose, and related equipment.
- (bb) Underground pipe size, length, location, weight, material, point of connection to city main; the type of valves, meters, and valve pits; and the depth that top of the pipe is laid below grade.
- (cc) Provisions for flushing Piping.
- (dd) When the system is to be installed as an addition to an existing system, enough of the existing system indicated on the plans to make all conditions clear.
- (ee) For hydraulically designed systems, the information on the hydraulic data nameplate.
- (ff) A graphical representation of the scale used on all plans.
- (gg) Contractor's name and address.
- (hh) Hydraulic reference points shown on the plan shall correspond with comparable reference points on the hydraulic calculation sheets.
- (ii) The minimum rate of water application (density), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside.
- (jj) The total quantity of water and the pressure required noted at a common reference point for each system.
- (kk) Relative elevations of sprinklers, junction points, and supply or reference points.
- (ll) If room design method is used, all unprotected wall openings throughout the floor protected.
- (mm) Load calculations for sizing of, and details of sway bracing.
- (nn) The settings for pressure reducing valves.
- (oo) Information about backflow preventers such as manufacturer, size, type.
- (pp) Information about antifreeze solution used such as type and amount. In addition, hydraulic calculations and water supply information shall be submitted in accordance with NFPA 13, Section 6-2 and Section 6-3, respectively.

APPENDIX 4

BUILDING CODE GUIDELINES FOR PROJECT SUBMITTALS

BUILDING CODE GUIDELINES FOR PROJECT SUBMITTALS

All projects shall be designed in accordance with the latest adopted edition of the Virginia Uniform Statewide Building Code (USBC). Drawings and specifications shall include the seal and signature of the architect or engineer licensed in Virginia under whose supervision they were prepared, or if exempt under the provisions of state law, shall include the name, address, license number, occupation and signature of the individual who prepared them. The cover sheet of the documents and/or the sheet containing the list of drawings shall have an original seal, signature and date of all regulated disciplines. In addition, the following items shall be included with each permit application:

- A cover letter, speed memo or LOT shall accompany all permit applications.
- Completed permit application.
- Sealed list of drawings on 8-1/2 x 11 sheets attached with the application. Any set of drawings more than 5 pages must have a sealed list of drawings on an 8 1/2" x 11" sheet of paper attached with the application.
- A copy of the prime contractor's license.
- A copy of the prime contractor's business license for the county where the work is being performed. (DCA-Arlington; IAD-either Fairfax or Loudon)
- A copy of all subcontractors' licenses.
- Two sets of PE sealed drawings for structural framing, foundations, mechanical, electrical, plumbing and sprinkler work. All drawings must be numbered, dated and bound. Drawings that include a Title block shall contain the appropriate signatures.
- Two sets of PE sealed specifications. Specifications shall be properly bound.
- A letter from the Engineer of Record stating whether or not Special Inspections are required by IBC 1704. When Special Inspections are required a list of the required inspections shall be included in the letter.
- Each permit application must include a completed Accessibility Compliance form.
- A drawing shall be provided indicating the location of the mop sink and the employee toilet facilities including the accessible facilities.
- PE sealed calculations for structural, plumbing, mechanical & Electrical.
- Third Party Structural peer review shall be provided for projects involving structural design.
- Temporary bracing letter stating whether or not bracing during construction is required.
- An Asbestos report or letter for all buildings regardless of age. ~~permitted before 1/1/85.~~
- A list of Hazardous Materials and quantities.
- An egress plan showing occupant loads, travel distances, existing use vs proposed use, number of exits required, etc. shall be included in the front end of the drawings along with the Code Data Sheet.
- Date plans submitted to Health Department (when required).
- Outside Agency approvals shall include at a minimum the following Outside Agency approval may include but is not limited to: VDEQ, VDH, Fairfax County water and sewer, DC-WASA, VA-DCR, Fairfax County Fire, NOVEC, Dominion Power, Columbia Gas, Verizon, VDOT, DGS, WAMATA, US Army Corp of Engineers, FAA.

Drawing Size and Scale

Drawings should measure a minimum 24" x 36" and be at a scale of 1/8" equals 1'-0" or larger. Site plans should be at a scale appropriate to identify any site work. Projects of a minor nature may be submitted on 8 1/2" x 11" sheets. Additional requests may be identified in the Authority's Design Manual.

Architectural Information

1. Name of Building and Project, Name of Occupant.
2. Use Group and Type of Construction. All components of construction shall be called out including but not limited to wall, ceiling and floor assemblies.
3. Furniture plan including occupant load and code analysis.
4. If located within a building, a key plan at a reduced scale showing the project's location within the building. If the egress system is dependent upon existing doors or stairs they shall be accurately located and identified on the key plan. Indicate the floor on which construction is to occur.
5. Overall dimensions of project space and egress components, including exit access corridors and doors. Identify the use of all rooms. Dimensions for each area or provide square footage.
6. Where fire rated assemblies are required, provide UL design numbers and a description of the system.
7. For fire rated doors, provide a schedule including frame and hardware.
8. Note interior finishes. List materials used with smoke developed rating and flame spread classification.
9. Provide any cross sections required to accurately depict the construction details.

Mechanical Information

1. Show connections to building systems, fire dampers, air volumes, and outside air requirements.
2. For new equipment provide:
 - a. Make, model and capacity
 - b. Location and electrical requirements.
3. Indicate return air systems. If the space between the ceiling and the structure is to be used as an environmental plenum, the designer must ascertain that no combustibles exist within the plenum.
4. For alterations to existing systems, provide ductwork or piping layouts with capacity of main lines.
5. Food and beverage facilities should include detailed plans/specifications for kitchen hoods and exhaust systems.

Plumbing Information

1. Where existing toilets are to be used, indicate location on key plan.
2. For all new plumbing fixtures, provide a floor plan and riser diagram. New fixtures shall meet applicable accessibility requirements.
3. Show all connections of new systems to existing. Note materials of all pipes and vents.
4. Show connections on site plan if necessary to describe system.

Electrical Information

1. Show existing or new panel locations with schedules.

2. Show tie-in to existing panels and protective devices.
3. Provide load calculations as required.
4. Show connections on site plan if necessary to describe system.

Fire Protection Systems

1. Show existing fire protection systems and any alterations and additions thereto, including:
 - a. Sprinklers and associated piping to the water source
 - b. Smoke detectors
 - c. Heat detectors
 - d. Pull stations
 - e. Alarm bells
 - f. Control panels
 - g. Extinguishers
2. Show interior fixtures, shelving, etc. that may affect sprinkler discharge or other fire protection equipment.
3. List hazardous materials that may be used, handled or stored on the premises.
4. Submit shop drawings for all new fire protection systems and equipment in accordance with NFPA 13.

APPENDIX 5

APPLICATION FOR MWAA CONSTRUCTION PERMIT

APPLICATION FOR MWAA CONSTRUCTION PERMIT

Submit To: Building Codes/Environmental Department
Washington National Airport
Washington, D.C. 20001

Date of Application _____ Existing Use Group _____ New Use Group _____

I. Project Title _____ DCA IAD
Location _____
Description of Project _____ Occupant Load _____
_____ (Y/N) Project will require excavation on the AOA at DCA *Est. Const. Cost \$ _____

**This cost data may be furnished to Arlington or Loudoun Counties.*

II _____ (Y/N) Hazardous materials are anticipated. Attach list of hazardous materials and quantities.

_____ (Y/N) This project will require Special Inspection, in accordance with USBC Sec. 1704.

III. Name of Applicant _____
Address _____
City _____ State _____ Zip _____
Contact _____ Phone # _____
Signature _____ E-mail _____

IV. Name of Contractor _____
Address _____
City _____ State _____ Zip _____
Contact _____ Phone # _____ E-mail _____
VA Contr. License*: Class _____ No. _____ Expiration Date _____

Classifications _____
Plumbing Contractor* Sprinkler Subcontractor* Electrical Subcontractor* Mechanical Subcontractor*

**Attach photocopy of current VA Contractors License for the prime and all subcontractors.*

The law requires all contractors performing physical work on Airport property must have a valid Virginia contractor's license.

V. Architect/Engineer _____
Address _____
City _____ State _____ Zip _____
Contact _____ Phone # _____ E-mail _____

MWAA FORM ED-(7/31)

APPENDIX 6
CONSTRUCTION PERMIT

Metropolitan Washington Airports Authority
CONSTRUCTION PERMIT

DULLES
 NATIONAL

PROJECT TITLE / WORK LOCATION	CONSTRUCTION TYPE	PERMIT NUMBER
DESCRIPTION OF WORK	USE GROUP	OCCUPANT LOAD

APPLICANT NAME

ADDRESS

CONTACT NAME AND TELEPHONE NUMBER

CONSTRUCTION COMPANY'S NAME

ADDRESS

FOR Information Only

CONTACT NAME AND TELEPHONE NUMBER

CONTACT NAME AND TELEPHONE NUMBER

VIRGINIA CONTRACTOR LICENSE:	Classifications	Class	License Number	License Expiration Date

<input type="checkbox"/>	Special inspections Required	<input type="checkbox"/>	49CFR 192 Gas Line (Third Party Inspection required)
--------------------------	------------------------------	--------------------------	---

<input type="checkbox"/>	"Certificate of Use and Occupancy" required.	<input type="checkbox"/>	"Final Inspection" required.
--------------------------	--	--------------------------	------------------------------

"Health Department Approval" required:	<input type="checkbox"/> N/A	<input type="checkbox"/> Arlington	<input type="checkbox"/> Loudoun	<input type="checkbox"/> FDA
--	------------------------------	------------------------------------	----------------------------------	------------------------------

THIS PERMIT IS ISSUED BY MWAA AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON LISTED PLANS.

PLAN NUMBER	DATE	DESCRIPTION

NOTE: The comments and conditions are required by Virginia Uniform Statewide Building Code, tenant lease agreement, Authority policy or other requirements of law.

APPROVED (MANAGER, BUILDING CODES/ENVIRONMENTAL DEPARTMENT)	DATE OF APPROVAL
Thomas R. Beatty	

POST IN CONSPICUOUS PLACE AT JOB SITE

MWAA FORM ED-02 (1/11)

APPENDIX 7
AIRPORT WORK PERMIT

**Metropolitan Washington Airports Authority
Washington Dulles International Airport
AIRPORT WORK PERMIT**

APPLICANT AND TELEPHONE NUMBER:			
ADDRESS:			
CONSTRUCTION COMPANY'S NAME (IF APPLICABLE):			
VIRGINIA CONTRACTOR LICENSE:	CLASS	LICENSE NUMBER	EXPIRATION DATE
ADDRESS:			
CONTACT PERSON AND TELEPHONE NUMBER			
PROJECT TITLE/WORK LOCATION:			
FOR Information Only			
DESCRIPTION OF WORK:			
THIS PERMIT IS ISSUED BY MWAA AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON LISTED PLANS. THIS PERMIT IS SUBJECT TO THE COMMENTS AND CONDITIONS IN COVER LETTER.		PERMIT NUMBER	EXPIRATION DATE
PLAN NUMBER:	DATE:	DESCRIPTION:	
APPROVED (MANAGER, ENGINEERING & MAINTENANCE DIVISION)			DATE OF APPROVAL

POST IN CONSPICUOUS PLACE AT JOB SITE

MWAA FORM ED-02 (5/07)

**Metropolitan Washington Airports Authority
 Ronald Reagan Washington National Airport
 AIRPORT WORK PERMIT**

APPLICANT AND TELEPHONE NUMBER:			
ADDRESS:			
CONSTRUCTION COMPANY'S NAME (IF APPLICABLE):			
VIRGINIA CONTRACTOR LICENSE:	CLASS	LICENSE NUMBER	EXPIRATION DATE
ADDRESS:			
CONTACT PERSON AND TELEPHONE NUMBER			
PROJECT TITLE/WORK LOCATION			
FOR Information Only			
DESCRIPTION OF WORK:			
THIS PERMIT IS ISSUED BY MWAA AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON LISTED PLANS. THIS PERMIT IS SUBJECT TO THE COMMENTS AND CONDITIONS IN COVER LETTER.		PERMIT NUMBER	EXPIRATION DATE
PLAN NUMBER:	DATE:	DESCRIPTION:	
APPROVED (MANAGER, ENGINEERING & MAINTENANCE DIVISION)			DATE OF APPROVAL
POST IN CONSPICUOUS PLACE AT JOB SITE			
MWAA FORM ED-02 (5/07)			

APPENDIX 9

BUILDING CODE INSPECTION REPORT

APPENDIX 10
CERTIFICATE OF USE AND OCCUPANCY

Metropolitan Washington Airports Authority Office of Engineering, MA-30 Ronald Reagan Washington National Airport Washington, D.C. 20001-4901				CERTIFICATE NO.			
				DATE APPLIED FOR			
CERTIFICATE OF USE AND OCCUPANCY							
Virginia Uniform Statewide Building Code Compliance				DULLES		NATIONAL	
BUILDINGS				CONST. PERMIT NO.		DATE ISSUED	
APPROVED				APPLICANT			
TITLE		DATE		CONTACT PERSON		PHONE	
REMARKS				PROJECT TITLE			
MECHANICAL				BUILDING/LOCATION WITHIN BUILDING			
APPROVED							
TITLE		DATE		USE GROUP			
REMARKS				NO. OF OCCUPANTS			
				TYPE OF CONSTRUCTION			
ELECTRICAL				FOR USE, IF APPLICABLE			
APPROVED				SPRINKLER SYSTEM PROVIDED		YES <input type="checkbox"/> NO <input type="checkbox"/>	
TITLE		DATE		SPRINKLER SYSTEM REQUIRED		YES <input type="checkbox"/> NO <input type="checkbox"/>	
REMARKS				SPECIAL CONDITIONS (IF MODIFICATION HAS BEEN GRANTED, ATTACH COPY TO THIS FORM).			
PLUMBING							
APPROVED							
TITLE		DATE					
REMARKS							
FIRE PROTECTION				FIRE MARSHAL			
APPROVED				COORDINATED			
TITLE		DATE		TITLE		DATE	
REMARKS				REMARKS			
This is to certify that the above described building or space is in substantial compliance with applicable provisions of the Virginia Uniform Statewide Building Code and permission to occupy said space is hereby granted subject to any conditions noted above.							
TEMPORARY OCCUPANCY APPROVED				FINAL OCCUPANCY APPROVED			
DATE		EXPIRES		DATE			
BUILDING OFFICIAL				BUILDING OFFICIAL			
Thomas R. Beatty				Thomas R. Beatty			

APPENDIX 13

**CERTIFICATE OF COMPLIANCE FOR
ELEVATORS, ESCALATORS AND MOVING WALKS**



Metropolitan Washington Airports Authority



Certificate of Compliance for Elevators, Escalators and Moving Walkways

Washington National Airport

Dulles International Airport

This certifies that this equipment is in compliance with ASME Standard No. A17.1

Name of Building _____

Owner or Agent _____

Type of Equipment _____

Date Inspected _____

Unit No. _____

Expiration Date _____

Power rain _____

Rated Capacity _____

Speed _____

Inspector _____

Building Code Official _____

Thomas R. Beatty

APPENDIX 14

SPECIAL INSPECTIONS FORMS/DATA SHEETS

USBC 1704 SPECIAL INSPECTIONS AND TESTING

PROJECT DATA SHEET

This information should be provided for each project where Special Inspections are required by the USBC.

If there is more than one lab or inspection firm performing Special Inspections on one project, a form for each firm is required.

Project	Permit Number
Contractor	Phone Number
Contractor QC Representative	Phone Number
MWAA Project Manager	Phone Number
PMC Lead Inspector	Phone Number
Structural Engineer of Record	
Structural Contact	Phone Number
Geo-technical Engineer of record	
Geo-technical Contact	Phone Number
Information Prepared By	Phone Number

INSPECTION AND TESTING AGENCY

Include copies of Certifications and Résumés

Special Inspection Agency	Phone Number
Engineer in Responsible Charge	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number
Field Inspector / Technician	Phone Number

LABORATORY AND EQUIPMENT INFORMATION

Attach latest Laboratory Certification

Laboratory Manager

Phone Number

Provide a list of all equipment in use for Special Inspections attach the latest certificate of calibration as applicable for each device.

This might include Air Meters, Cylinder Break Machines, Nuclear Gauges, etc.

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Identify the inspectors performing the following inspections include copies of Certifications and résumés:

Concrete Construction
Shop Inspection

- Quality Control
- Review Mfr. Test Reports
- Pre-cast Inspections
- Equipment Calibration

Laboratory Testing

- Concrete Materials
- Reinforcing or Pre-stress Strength
- Concrete Strength

Field Inspection

- Reinforcement
- Formwork
- Strength Field Test
- Concrete Placement
- Concrete Finishing
- Concrete Curing
- Pre-stress or Post-tensioning Elongation

Identify the inspectors performing the following inspections include copies of Certifications and résumés:

STRUCTURAL STEEL INSPECTION AND TESTING

Shop Fabrication

_____ Check here if AISC plant certification is used. Attach a copy of AISC Certification

- _____ Quality Control Procedures
- _____ Shop Welding Procedures
- _____ Material Certifications
- _____ Dimensional Checks
- _____ Bolt Installation
- _____ Non-destructive Testing
- _____ Shop Coatings

Field Inspection

- _____ Erection Procedures
- _____ Welder Qualifications
- _____ Field Welding
- _____ Dimensional Checks
- _____ Bolt Installation
- _____ Field Testing
- _____ Field Coatings
- _____ Column Plumb ness
- _____ Roof and Floor Decking
- _____ Pre-cast Connections

Identify the inspectors performing the following inspections include copies of Certifications and résumés:

Masonry Construction Inspection and Testing

Field Inspection

_____	Mortar Mix
_____	Unit Placement
_____	Reinforcement
_____	Hot Weather Precautions
_____	Cold Weather Precautions
_____	Units and Finished Work

Pile Foundations

Only field inspections are listed. A project involving the installation of piles requires submission of the Information Sheet for Pile Foundations.

Field Inspections

_____	Load Test Set-up and Reading
_____	Blow Count
_____	Cut-off and Tip Elevation
_____	Plumb ness
_____	Assist with Driving Criteria
_____	Monitor Overdrive Damage
_____	Conformity of Driving Head

CAISSON FOUNDATIONS

Field Inspections

Material

Rock Socket Dept, Suitability & Bedding

Reinforcement

Strength

SPRAYED ON FIREPROOFING MATERIALS

Field Inspections

Surface Conditions

Application

Thickness

Density

Bond Strength

APPENDIX 15
PERMIT APPLICATION CHECK LIST

Permit Check List

Project Name: _____ Permit # _____
Submitted By: _____ Date _____
(Issued by MWWA)

- 1. Completed permit application.
- 2. Sealed list of drawings on 8-1/2 x 11 sheets attached with the application.
- 3. A copy of the prime contractor's statewide contractor's license and business license.
- 4. A copy of all subcontractors' statewide contractor's licenses.
- 5. Two sets of PE sealed drawings for structural framing, foundations, mechanical, electrical, plumbing and sprinkler work.* All drawings must be numbered, dated and bound.
- 6. Two sets of PE sealed specifications. Specifications shall be properly bound.
- 7. Name, address and occupation of person preparing drawings if no seal is required.
- 8. Title block with appropriate signatures.
- 9. Special Inspections letter stating which are required by IBC 1704.
- 10. The Special Inspector shall be submitted with permit application using Appendix 14.
- 11. Accessibility Compliance form.
- 12. A drawing indicating the location of the mop sink and the employee toilet facilities including the accessible facilities.
- 13. PE sealed calculations for structural, plumbing, mechanical & Electrical.
- 14. Third Party Structural peer review for projects involving structural design.
- 15. Temporary bracing letter stating the requirements for bracing during construction.
- 16. A sealed letter stating that the installation complies with the International Energy Conservation Code.
- 17. An Asbestos report or letter for all buildings regardless of the age of the building.
- 18. A list of Hazardous Materials and quantities.
- 19. An egress plan showing occupant loads, travel distances, existing use vs proposed use, number of exits required, etc.
- 20. Date plans submitted to Health Department (when required).
- 21. Outside Agency approvals**

* The cover sheet of the documents and/or the sheet containing the list of drawings shall have an original seal, signature and date of all regulated disciplines.

** Outside Agency approval may include but is not limited to: VDEQ, VDH, Fairfax County water and sewer, DC WASA, VA-DCR, Fairfax County Fire, NOVEC, Dominion Power, Columbia Gas, Verizon, VDOT, DGS, WAMATA, US Army Corp of Engineers, FAA.

*** All required letters shall be addressed to the Building Code Official.

APPENDIX 16

THIRD PARTY INSPECTIONS DATA SHEET

THIRD PARTY INSPECTIONS

PROJECT DATA SHEET

This information should be provided for each project where Third Party Inspections are being performed.

Include copies of Certifications and Résumés

_____	_____
Project	Permit Number
_____	_____
Contractor	Phone Number
_____	_____
Contractor QC Representative	Phone Number
_____	_____
MWAA Project Manager	Phone Number
_____	_____
Information Prepared By	Phone Number
_____	_____
Third Party Inspection Agency	Phone Number
_____	_____
Engineer in Responsible Charge	Phone Number
_____	_____
Field Inspector /Commercial Building Inspector	Phone Number
_____	_____
Field Inspector / Commercial Mechanical Inspector	Phone Number
_____	_____
Field Inspector / Commercial Plumbing Inspector	Phone Number
_____	_____
Field Inspector/ Commercial Electrical Inspector	Phone Number
_____	_____
Field Inspector / Fire Protection Inspector	Phone Number
_____	_____
Field Inspector / Elevator Inspector	Phone Number