



WCAA General Permit and Construction Guidelines

Detroit Metropolitan Wayne County Airport

Revised September 30, 2008

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- Attachment "A" – Plants Attractive to Wildlife
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- Attachment "C" – Tenant’s Checklist
- Attachment "D" – Procedures for Badging Contractors
- Attachment "E" – Vehicle Access and Operations Construction Office
- Attachment "F" – FAA Accessibility Key Provisions Attachment
- Attachment "G" – Sample of WCAA C/A Permit Application with Instructions
- Attachment "H" – Insurance and Bonds Requirements

General Construction Standards

1. Applicability of Standards

The Wayne County Airport Authority (hereinafter referred to as "WCAA") has designed the WCAA General Permit and Construction Guidelines (hereinafter referred to as the "Guidelines") to be applicable to any and all demolition, design and or construction work done on any and all Airport property (hereinafter referred to as the "Premises") by any and all concessionaires, tenants, contractors, or others (hereinafter referred to as the "Tenant") who have agreements (hereinafter referred to as the "Agreement") with the WCAA in which the Tenant is obligated to demolish, design, or construct improvements (hereinafter referred to as the "Improvements") to such Premises. In the event the Improvements are not completed directly by the Tenant, but instead the Tenant enters a contract with a contractor (hereinafter referred to as the "Contractor") for completion of the Improvements, the Tenant shall be responsible for assuring that their Contractor complies with the applicable provisions of these Guidelines.

2. Reference Documents

2.1. The Guidelines are to be read in conjunction with:

- The Agreement; and
- City of Romulus Building Permit, WCAA Construction or Alteration Application and Health Department requirements.

2.2. The Tenant shall be responsible for reviewing, understanding, and implementing, as part of their design, all codes, and regulations applicable to the work. Review of the Tenant's documents by the WCAA does not include code compliance and does not relieve Tenant of responsibility to satisfy all applicable regulations. These regulations include, but are not limited to:

- 2003 Michigan Building Code
- 2003 International Fire Code
- 2003 Michigan Mechanical Code
- 2003 Michigan Plumbing Code
- 2002 National Electrical Code
- Applicable International Fire Code
- Federal, state and local regulations, laws and ordinances
- Most current edition of NFPA 1 Fire Prevention Code
- Most current edition of NFPA 101 Life Safety Code
- Most current edition of NFPA 407 Standard for Aircraft Fuel Servicing
- Most current edition of NFPA 409 Aircraft Hangars
- Most current edition of NFPA 415 for Construction and Protection of Airport Terminal Buildings, Fueling Ramp Drainage and Loading Walkways
- Most current edition of NFPA 2001 Clean Agent Fire Extinguishing Code
- American Association of State Highway and Transportation Officials (AASHTO)
- Other referenced NFPA codes and standards as directed by the A. H. J.
- Michigan Department of Transportation requirements
- FAA and TSA requirements

- Health Department Regulations
- American Disabilities Act
- State of Michigan Barrier-Free Requirements
- Most recently amended ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)
- FAA 7460-1 Forms and any additional FAA requirements.
- Aviation Security Improvement Act.
- All applicable Environmental Laws.
- WCAA CAD Drawing Standards

NOTE: These codes and standards are minimum requirements, and additional requirements may be mandated by the AHJ.

- 2.3. Familiarity with these and the Reference Documents will form the basis of the WCAA's approval of all Tenant design and construction work. In case of discrepancy between these Guidelines and the Agreement, the Agreement shall take precedence and shall apply.

3. WCAA's Representation and Design Review

- 3.1. Design review will be conducted, by WCAA. Questions regarding Design Review items shall be directed to the WCAA as indicated below:

Attention: Wayne G. Sieloff, AIA NCARB
 Director, Planning Design and Construction Division
 Detroit Metropolitan Wayne County Airport
 L. C. Smith Terminal – Mezzanine
 Detroit, MI 48242
 Telephone: 734-247-7371
 Fax: 734-247-7138
 Email: wayne.sieloff@wcaa.us

4. Permits, Fees and Approvals

- 4.1. Tenants are responsible for obtaining all permits, paying all fees and obtaining all required approvals.
- 4.2. Design approvals shall be obtained by the Tenant from the WCAA in conformance with the requirements of this document as stated in this document under the Tenant Design Submission Requirements.
- 4.3. Following the design approvals, the Tenant shall obtain permits from the City of Romulus and their Health Department. Note that approval by the WCAA does not constitute approval from the City of Romulus Building Department or their Health Department. Approval from the Federal Aviation Administration ("FAA") may also be necessary.
- 4.4. Construction shall not commence until the above noted approvals and permits are secured and satisfactory evidence of same has been provided to the WCAA and

have a current approved set of construction documents at the project site for reference at all times.

- 4.5. The Tenant shall at all times during the performance of the Tenant's work, post the approved Construction/Alteration Permit from WCAA in a conspicuous location at the place of the work.
- 4.6. For additional permit and approval requirements during the course of construction to this document, see Construction Regulations.
- 4.7. Upon completion of the Tenant's Improvements, the Tenant shall secure all applicable certificates of inspection, and provide the WCAA with a statutory declaration confirming that there are no liens, workers' compensation claims, or other encumbrances affecting the Premises in respect of work, services, materials and equipment relating to the Improvements and that all accounts for work, services, materials and equipment have been paid in full with respect to all of the Improvements. Occupancy of the Premises shall not be permitted until this requirement is fulfilled.
- 4.8. The Tenant shall obtain an Occupancy Certificate from the City of Romulus Building Department. In the case of food or beverage tenancies the Tenant shall also obtain all approvals and certificates as required by their Health Department.
- 4.9. The Tenant must obtain written authorization from WCAA Concessions to open the Premises. The requirements of paragraphs 4.6, 4.7 and 4.8 are prerequisites of any such authorization.
- 4.10. Prior FAA approval in the form of an airspace review will be required for all outside constructions and construction equipment when height of said equipment exceeds that of adjacent structures.
- 4.11. Permits and use approval for cranes must be obtained from airport operations prior to use. All cranes must be equipped with approved flags and lights, and approval from the tower must be obtained prior to raising the boom daily.

5. Assurance of Professional Design and Field Documentation

The Tenant's design team shall provide evidence, satisfactory to the WCAA, of professional services throughout the design, documentation and field review stages of the work. All submittals including construction documents and "as-built" drawings must be signed and sealed.

6. Verification of Existing Conditions

Wherever possible the WCAA will provide one (1) set of black and white prints for the Tenant's information. The WCAA will make its best efforts to provide the most current information available, but does not warrant the accuracy or completeness of same. The Tenant shall be responsible for verification of existing conditions including, but not limited to, surveying the existing property, performing necessary soil borings, and providing complete environmental assessments of the property to be developed.

7. WCAA Authorization of Modifications

- 7.1. Work required on behalf of the Tenant or to accommodate the Tenant's design requirements to Airport property can be completed only after written approval of the WCAA.
- 7.2. Costs for such work shall be paid by the Tenant, following completion of the work by a WCAA approved contractor.
- 7.3. The WCAA, in its sole discretion, may require the Tenant to provide an irrevocable letter of credit, in a form and from a financial institution acceptable to the WCAA as security against all of the Tenant's obligations for work performed to the Premises.
- 7.4. Under no circumstances will the Tenant's contractor be permitted to make modifications to the existing Airport systems without prior written approval from the WCAA.
- 7.5. Occupancy shall not be permitted until the work is fully paid and approved by the WCAA.

8. Safety and Security

- 8.1. It is the intention of the WCAA that a safe, secure and healthy work place is provided for each and every worker on the Premises. This applies to work performed within the Premises or under Tenant control.
- 8.2. The Tenant and its contractors have sole and complete responsibility for safety on the project. The Tenant shall designate a safety representative during the entire construction period. The Tenant and its contractors shall comply with all health and safety requirements or standards in effect under the Federal, OSHA, State of Michigan, Wayne County, and WCAA standards.
- 8.3. Fire protection shall comply with all fire regulations in effect under Federal, OSHA, EPA, State of Michigan, Wayne County, and WCAA standards.
- 8.4. Security of the Tenant's premises during the Tenant's fixturing period shall be the responsibility of Tenant, who shall take all necessary steps to secure the Premises. The WCAA shall have no liability for any loss or damage including theft of building materials, equipment, supplies, fixtures or stock.

9. Working in the Airport

- 9.1. Tenant's representatives, design team and contractor shall recognize that their work is being conducted in an operating airport, the functioning of which may not be disrupted for any reason. The WCAA reserves the right to stop the Tenant's work at any time, for any reason the WCAA deems necessary to maintain the operation, standards or requirements of the Airport.

- 9.2. Tenant representatives, design team and contractors who will be working in any area of the airport beyond the security checkpoint are required to obtain an employee access control photo identification badge ("ID Badge"). Forms shall be filled in and be completed and returned.
- 9.3. If the Tenant and/or its consultants require access to a space not currently being utilized or operated by the same Tenant, prior approval must be obtained for access to that space. The Tenant must request, from the WCAA or its designated representative, access to the space a minimum of 48 hours prior to the desired time of access.
- 9.4. For additional information on working in the airport see section of this document labeled Construction Regulations.

10. Tenant's Checklist

This checklist is for reference and use by the WCAA and the Tenant, and may be subject to change by the WCAA who will so notify the Tenant. See Attachment "C" of this document for further information.

11. Tenant Facility Maintenance Guidelines

In order for Tenant construction projects to be considered maintenance, the following conditions must be met:

- 11.1. The scope of work will not change or modify the existing facilities.
 - 11.1.1. Work to be performed is work done in kind. Examples of this type of work includes replacement of existing equipment or failed materials as well as patching/repairing existing walls, flooring, roofing, etc.
 - 11.1.2. If any equipment or materials are to be added or completely replaced as part of a refurbishment to the existing facilities (such as a roof replacement or finish upgrades, or any similar type of project), WCAA Construction/Alteration Permit procedures are to be adhered to.
 - 11.1.3. The WCAA reserves the right to determine what type of project is considered a repair or a construction/alteration.
- 11.2. All work, regardless of whether it is a repair or a construction/alteration, must be described on a C/A Permit application signed by the Tenant's representative. The submittal must also include a scope of work, sketches of where the work is to take place and a price of the repair to be made. The contractor must also issue insurance per WCAA requirements prior to commencement of work. **If the above procedure is not met by either the Tenant and/or the Contractor, work will be immediately ceased until the above conditions are met.**

Tenant Design Submission Requirements

1. General

- 1.1. Preparation and submission of drawings, samples, and specifications for the fixturing of the Premises, for the WCAA's review, must be in accordance with the Section labeled "General Construction/Alteration (C/A) Permit Procedures", this Section and as set out in the Agreement.
- 1.2. The design and submitted documents and materials shall be prepared by design professionals registered to practice in the State of Michigan, examples of whose previous design work shall be of a standard acceptable to the WCAA at its sole discretion.
- 1.3. For the benefit of the Tenant's design team, attention is drawn in particular to the non-combustible classification of the building, related flame spread ratings and smoke development classification of materials and the seismic restraint of construction components. Documentation demonstrating compliance with these requirements shall be provided by the Tenant if requested by the WCAA.
- 1.4. Submitted drawings must show use group, type of construction, and occupant load on plans.
- 1.5. WCAA drawings of the Premises will be provided for the Tenant's information.
- 1.6. Submission Documentation shall be as follows:
 - Drawings in 24"x 36" format (unless otherwise approved by the WCAA) in English measurement at the following scales:
 - Key plans; 1/32" = 1'.
 - Floor plans, reflected ceiling plans, merchandising plans, interior elevations, sections and related details; 1/4" = 1'.
 - Flow diagrams and adjacency plans at 1/8" = 1'.
 - Storefronts, signage, logos and lettering, in elevation, section or detail; 1/2" = 1'.
 - Material samples on minimum 11" x 17" size boards, complete with legend.
 - Renderings on minimum 11" x 17" stock.
- 1.7. Unless otherwise required in this document or by the WCAA, all submissions shall include:
 - Three (3) Full size blackline or photocopied sets.
 - Seven (7) half size blackline or photocopied sets.
 - Original material sample board shall be submitted with two (2) full-size color photocopies. All renderings shall be submitted in duplicate, ten (10) copies.
 - Electronic Image documents submitted on compact disk(s) containing electronic files of the above documents.
 - Drawings may be TIFF Group 4 or PDF files (HPGL/2 plot files if the required conversion fee is paid to WCAA).
 - Specifications, reports or other documents may be in TIFF Group 4 or PDF format.

- 1.8. Where CAD documentation is prescribed by Article 3 of this Section, all drawings shall be submitted in conformance with the following WCAA standards.
- One (1) set of AutoCAD 2005 format drawings files submitted on compact disk(s) in accordance with the following requirements:
 - Layering must conform to AIA CAD Layering Guidelines and be submitted to the WCAA for approval.
 - All fonts, blocks, external reference files (x-refs), raster images, or other CAD drawing elements resident in the CAD files must be included with the CAD files.

2. Submission Documentation

NOTE: Partial or incomplete submittals in any of the following steps will be rejected and will not be reviewed by the WCAA.

2.1. Preliminary Design Submission (10% development)

The following indicates the minimum requirements of the "Preliminary Design Submission."

- Architectural color renderings of the proposed concept(s) that include the interior and exterior views of the facilities and show:
 - The overall design concept for the space
 - General color scheme
 - Fixtures, displays and millwork
 - Furniture
 - Interior and exterior signage and graphics including a store blade sign.
- Color floor plan(s) of the facility showing aircraft parking plan, fixture layout, expected queuing, storage, and other pertinent features. (Note: Consider ingress, egress and circulation requirements for passengers with disabilities and passengers with luggage carts, strollers etc.)
- Material boards that demonstrate the quality of the various materials to be used within the facility including floor covering, wall covering, ceiling covering; and service counter and other display areas.
- Developed site plan showing all elements of the site to be modified to accommodate this development including landscaping, pavement, utility modifications, building placement, curb geometrics, site circulation, etc.
- Key Plan showing the location of Premises within the Airport.
- Floor Plan(s) showing interior design including materials and finishes and concept for securing the premises when closed.
- Reflected Ceiling Plan(s) showing ceiling materials, various heights, location and type of all light fixtures.
- Storefront elevation, interior elevations, wall sections. Storefront elevation must illustrate all graphics, signage, materials and finishes.
- Utility needs assessment to determine what the development will require and how it will impact existing utilities within the proposed site.

2.2. Schematic Design Submission (30% development)

The following indicates the minimum requirements of the "Schematic Design Submission." **NOTE: These submittals must address all issues identified by the**

WCAA's Project Review comments/requirements from the previous submission(s).

- Key Plan showing the location of Premises within the Airport.
- Floor Plan(s) showing interior design including materials and finishes and concept for securing the premises when closed.
- Reflected Ceiling Plan(s) showing ceiling materials, various heights, location and type of all light fixtures.
- Storefront elevation, interior elevations, wall sections. Building elevations must illustrate all graphics, signage, materials and finishes.
- Mechanical and electrical plan, schedules and details.
- Sample board of proposed materials, colors, finishes and furnishings.
- Fixture cuts of all proposed lighting, furnishings, diffusers, grilles, sprinkler heads and accessories.

2.3. Design Development Submission (60% development)

2.3.1. Architectural

- Key Plan showing location of the Premises within the Airport.
- Floor Plan(s) indicating closure locations of partitions, placement of fixtures, furnishings, floor patterns, material selections, storage and washroom locations (if any).
- Reflected ceiling plan(s) showing ceiling materials, various heights, location of some light fixtures, diffusers, grilles and sprinkler heads.
- Interior wall elevations, preliminary sections and details.
- Exterior elevations showing materials and various heights of structures.
- Outline specifications, interior/exterior finish and color, door and windows.
- Revised fixture cuts of all lighting, and plumbing fixtures including manufacturers name, catalogue number, catalogue cut, lamp types, mounting and custom designs.

2.3.2. Heating, Ventilating and Air Conditioning

- Floor plan showing duct layouts fan locations and preliminary equipment layout(s).
- Specifications and fixture cuts.
- Heat gain/loss calculations.
- Venting, make-up air requirements.

2.3.3. Plumbing (if applicable)

- Floor plan of services.
- Specifications and fixture cuts.
- Venting requirements.
- Preliminary riser diagrams.
- Verification of existing capacities.

2.3.4. Sprinklers and Fire Protection

- Sprinkler distribution changes, head layout and hydraulic calculations (if applicable).

- Verification of existing capacities.

2.3.5. Electrical

- Floor plan showing electrical requirements.
- Single line distribution diagram.
- Specifications and fixture cuts.
- Total electrical demand and connected loads, service location and size of transformer (if required).

2.4. Design Development Submission (90% development)

2.4.1. Architectural

- Key Plan showing location of the Premises within the Airport.
- Floor Plan(s) indicating closure locations of partitions and type of construction, placement of fixtures, furnishings, floor patterns, material selections, storage and washroom locations (if any).
- Reflected ceiling plan(s) showing ceiling materials, various heights, location of all light fixtures, diffusers, grilles and sprinkler heads.
- Interior wall elevations, sections and details sufficient for construction.
- Exterior elevations showing ceiling materials, various heights, location of all light fixtures, signage and emergency exit(s).
- Sign, logo and lettering details showing elevation and section views, letter style and size, all colors and materials, methods of illumination, installation, color of illumination and voltage requirements. This shall include signage for the Blade Sign as applicable. All signage must be professionally designed and fabricated. Designs shall be complete as part of the working drawing submission. Design-build signage arrangements will not be accepted.
- Specifications, interior/exterior finish and color, door, windows and hardware schedules.
- Confirmed fixture cuts of all lighting, and plumbing fixtures including manufacturers name, catalogue number, catalogue cut, lamp types, mounting and custom designs.
- Details of securing the Premises when closed.

2.4.2. Heating, Ventilating and Air Conditioning

- Floor plan showing fan coil or VAV units, duct layout, size of grilles and diffusers, thermostats where applicable.
- Specifications and fixture cuts.
- Heat gain/loss calculations.
- Venting, make-up air requirements.

2.4.3. Plumbing (if applicable)

- Floor plan of services.
- Specifications and fixture cuts.
- Venting requirements.
- Riser diagrams.
- Verification of existing capacities.

2.4.4. Sprinklers and Fire Protection

- Sprinkler distribution changes, head layout and hydraulic calculations (if applicable).
- Heat baffles (if applicable).
- Fire extinguisher locations.
- Verification of existing capacities.

2.4.5. Electrical

- Floor plan showing electrical requirements.
- Single line distribution diagram.
- Fixture schedule showing quantity and watts for each fixture.
- Special lighting.
- Specifications and fixture cuts.
- Total electrical demand and connected loads, service location and size of transformer (if required).
- Completed table of electrical loads.

2.5. Construction Document Submission (100% development)

NOTE: This submittal must address all issues identified by WCAA's Project Review comments/requirements in previous submittals. In addition to the previous requirements, the following indicates the minimum requirements of the "Construction Drawings Submission."

- Complete CAD documentation of the submission as per paragraph 1.7 of this section.
- Assurance of professional design, documentation and commitment for field review.

2.6. Post Construction Submissions

See Section labeled "Construction Regulations, Item 2.20, Project Close-Out Requirements.

Technical Requirements

1. General

- 1.1. Design criteria have been developed to maintain design quality and consistency while encouraging designers to be imaginative and innovative.
- 1.2. The WCAA will review each design submission on individual merit and in the context of neighboring premises, and reserves the right to require changes to, or reject elements of the design in whole or in part.
- 1.3. Exterior structures shall provide a consistent image, signage and finishes package for the entire Premises. This requirement is equally applicable to single concessions and to those having multiple "sub-Tenants", representing more than one brand or concept in single Premises.
- 1.4. Tenants proposing branded concepts shall require and insure that the brand make available the full range of its latest concept designs to the WCAA Concession Program.
- 1.5. Tenants are reminded that submitted designs will be evaluated against the overall Design Guidelines described in this manual.
- 1.6. Floor protection to be used during all construction related deliveries (including materials, casework, equipment, etc.).
- 1.7. Concrete coring and chipping depending on the noise level will have to be performed after hours. Protection must be provided under the spaces to collect debris.
- 1.8. Delivery of construction materials and debris removal must to be performed after hours. All debris must be removed from Airport property.
- 1.9. If barricades are anticipated they must be submitted and approved by the WCAA.
- 1.10. Installation and removal of any construction barricade walls cannot take place without consent of WCAA Inspector. All construction barricade walls are to be metal framed, 5/8" Type X Drywall, finished and painted white with an approved vinyl base material. Installation of this barricade and removing it must be done after hours. Construction doors should open into construction space. See WCAA Inspector for barricade wall projection limitations in passenger movement areas.
- 1.11. All penetrations are to be fire stopped with the proper code approved products.
- 1.12. Any Fireproofing or Soundproofing material that is damaged or penetrated must be replaced with equal code rated approved material.
- 1.13. All work done as part of this project is to be in accordance with current Health Department standards.

- 1.14. All cutting or welding shall require a site inspection and permit from WCAA Fire Marshal prior to work taking place.
- 1.15. WCAA Operations, Security divisions and the WCAA Inspector must approve all delivery routes.
- 1.16. Material storage on site must be coordinated with the WCAA Inspector.
- 1.17. Copies of approved mix designs, testing results, rough/final building and mechanical inspections, Certificate of Occupancy from the City of Romulus Building Authority and "as built" drawings, must be submitted to WCAA Inspectors office within 90 – 120 days after final inspection and use/occupancy of the building.
- 1.18. The WCAA Inspector shall be granted access to job site for the purpose of inspecting for compliance to the conditions outlined in this permit. Inspections include, but are not limited to, permit compliance, sewer connections, water taps, gas taps, footing excavations, site preparation and construction methods. Utility tapping fees will be paid directly to the WCAA.
- 1.19. Provide WCAA Inspector with detailed job schedule and a listing of all Contractors and sub-contractors prior to start. A list must be provided to WCAA Inspector of all contact person names and phone numbers
- 1.20. It is the responsibility of the Contractor to have a site supervisor present at all times when any work is being performed for this facility.
- 1.21. Any damage to existing facilities, finishes, and utilities is the responsibility of the permit holder. Repair and/or replacement must be completed within the timeframe and requirements of the WCAA.
- 1.22. WCAA Inspector along with WCAA Operations Construction Dept will decide on locations of a covered dumpster if one is requested.
- 1.23. All work requiring any power interruptions must be coordinated through WCAA Operations, Electricians and Inspectors offices. The Contractors must provide written notice to all appropriate WCAA departments and all affected parties 72 hours prior to any power interruption. All temporary power will be supplied by contractor and must be coordinated through WCAA staff. Power interruptions will normally take place between the hours of 11:00 p.m. and 5:00 a.m.
- 1.24. Upon completion of the project site restoration shall be the burden of the Contractor. This restoration includes, but is not limited to, removal of all temporary trailers, temporary fencing, portable toilet, dumpsters, temporary fuel storage containers, cutting and cap of all temporary utility connections at their point of origin, and any other items deemed necessary by the WCAA. Final inspection and approval of the site by the WCAA Fire Marshal, WCAA Operations, WCAA Security and the WCAA Inspector must be obtained prior to occupancy and use of the Premises.
- 1.25. All parties will conform to FAA and WCAA standards for security.

- 1.26. Contractors, sub-contractors and delivery persons must follow TSA Guidelines.
- 1.27. The FAA prior to the start of work must approve complete FAA form 7460-1.
- 1.28. Prior FAA approval in the form of an airspace review will be required for all outside constructions and construction equipment when height of said equipment exceeds that of adjacent structures.
- 1.29. Permits and use approval for cranes must be obtained from airport operations prior to use. All cranes must be equipped with approved flags and lights, and approval from the tower must be obtained prior to raising the boom daily.
- 1.30. Keep taxi lane clean of FOD. Broom sweeping of taxi lane will be required.
- 1.31. All construction trailers used must be in compliance with item 13.1 Temporary Trailers located in this section.
- 1.32. As-Built Document Requirements
All C/A projects approved by the WCAA requires submission of accurate as-built record documents to the WCAA within 90 days of completing the project. The As-built submittal must include the following:
 - a) A Transmittal describing the contents of the submittal. This transmittal must include the project title, project description, and the WCAA C/A Permit Number;
 - b) Two (2) bound bond paper sets of all specifications (if not on drawings), reports, manuals, warranties, etc.;
 - c) One (1) full size set of drawings on mylar;
 - d) One (1) set of drawings reduced to 8½" x 11" format;
 - e) All survey information must be performed using WCAA bench marks.
 - f) Profiles for all existing utilities encountered during construction along with all new utilities/underground structures to be submitted in CAD format.
 - g) One (1) complete set of AutoCAD 2000 format (or later version) drawing files submitted on compact disk(s) in accordance with the following requirements:
 - Layering must conform to AIA CAD Layering Guidelines and be submitted to the WCAA for approval.
 - All fonts, blocks, external reference files (x-refs), raster images, pen tables or other CAD drawing elements resident in the CAD files must be included with the CAD files.
 - h) One (1) Electronic Image set of the above as-built record documents (items a thru c) on compact disk(s).
 - Drawings may be TIFF Group 4 or PDF files. HPGL/2 plot files may be submitted if prior approval has been granted by the WCAA.

- Specifications, reports or other documents may be in TIFF Group 4 or PDF format.

2. Demolition

- 2.1. Hazardous material survey must be completed. Copies of complete report must be turned over to the WCAA prior to assembling an abatement work plan.
- 2.2. Hazardous material abatement work must be completed before demolition starts.
- 2.3. Permit applicant or their contractor shall provide the Airport Inspector's office a detailed list of any hazardous materials removed from this site including type of material and final disposal point.
- 2.4. Utilities, easements, etc. passing through demolition areas must be kept in service and identified prior to construction.
- 2.5. All hydrants to be removed and turned over to WCAA Water Department.
- 2.6. Provide information on dust control during the demolition process.
- 2.7. All existing electrical, plumbing and data lines not being re-used are to be capped or terminated at the source of origin. See WCAA Inspector for further clarification if needed.
- 2.8. See Item 13 section for Environmental Requirements.

3. Site Improvement

- 3.1. General Site Requirements:
 - 3.1.1. The Contractor shall provide silt barriers for all storm sewer catch basins located within the limits of construction (see erosion control requirements).
 - 3.1.2. Upon completion, the Contractor must jet all existing storm sewer lines connected to the developed site.
 - 3.1.3. Provide details for connection of utilities (gas, electric, water, sanitary, storm).
 - 3.1.4. Provide provisions to ensure positive drainage and conveyance of runoff to appropriate storm system components.
 - 3.1.5. The contractor shall request, and have completed, underground utility sweeps from airport maintenance, airport security, the FAA and miss dig prior to the commencement of any excavating.

- 3.1.6. Provide 3-days advanced notice to WCAA Electrical Department to mark airport electrical prior to the commencement of work. Notification is the responsibility of the contractor.
 - 3.1.7. Any underground utilities and/or FAA lines damaged by the Contractor in the scope of work shall be repaired immediately at the Contractor's expense.
 - 3.1.8. Height of equipment to be used in performing this work must not exceed the height of existing structures on the site. If the height is to go beyond these structures, prior approval must be obtained from the FAA
 - 3.1.9. All cuts to existing pavement shall be full depth. All slurry shall be cleaned up immediately upon completion. No dry cutting will take place in high traffic areas. The Airport Inspector, as to the process, will evaluate this.
- 3.2. Erosion Control Standards:
- 3.2.1. All materials and workmanship shall be in accordance with the WCAA specifications which are defined as the 1996 Michigan Department of Transportation (MDOT) Standard Specifications for Construction as modified by Wayne County Special Provisions.
 - 3.2.2. All temporary soil erosion and sedimentation controls (SESC) shall be in place before any construction affecting runoff and/or the waterway is started.
 - 3.2.3. Periodic inspection and maintenance must be provided to ensure that the soil erosion and sedimentation control (SESC) devices specified operate efficiently. Such inspection and maintenance shall be included in the unit price of the pay item specified.
 - 3.2.4. The location of SESC's shall be field adjusted as directed by the WCAA Inspector to provide the most effective control of runoff to prevent erosion and sedimentation.
 - 3.2.5. Any accumulations of sediment shall be removed and stockpiled in a stabilized area, so as to prevent the material from eroding back into the drainage course. The removal of accumulated sedimentation or debris will be included in the SESC pay items, unless otherwise provided for on the plans or in the proposal.
 - 3.2.6. Upon completion of construction and the establishment of permanent SESC's (i.e. seeding and mulching, sodding and/or riprap) the temporary SESC's shall be removed and the area restored to match the surrounding area.
 - 3.2.7. Stone or Gravel Filter at Inlets:
 - 3.2.7.1. The number of sides of the filter may vary depending upon the location and type of intake structure.

- 3.2.7.2. Use of these filters is not recommended in areas which are likely to be continuously disturbed by construction traffic, unless they are adequately protected.
- 3.2.8. Silt Fence:
- 3.2.8.1. If the Silt Fence fails under moderate rain storms, the geotextile filter fabric shall be reinforced with hardware cloth, straw bales or approved equal.
- 3.2.9. Structure Sediment Pit:
- 3.2.9.1. Inlet Sediment Pit shall be used as directed by the Engineer and is included in the cost of the drainage structure protected.
- 3.2.9.2. The sediment deposition area and geotextile filter fabric shall be cleaned of all accumulated sediment after each storm, or as directed by the WCAA Inspector.
- 3.2.9.3. After all contributing areas are stabilized, the geotextile filter fabric shall be removed, sediment deposition area filled with approved material and a Sod Inlet Filter placed over the disrupted area.
- 3.2.10. Straw Bale Diversion Berm and Stone Outlet Filter:
- 3.2.10.1. Straw Bale Diversion Berm is to be used to divert storm runoff to an acceptable outlet that contains a Soil Erosion and Sedimentation Control Device.
- 3.2.10.2. The Stone Outlet Filter shall be used to outlet diverted storm runoff to a waterway or drainage channel capable of handling the flow without further erosion.
- 3.2.10.3. If the flow through the outlet filter is appreciable or of high velocity, hardware cloth shall be installed to prevent the filter stone from washing downstream, and shall be included in the unit price of the filter.
- 3.2.11. Check Dams:
- 3.2.11.1. Check Dams shall be removed after vegetation or a permanent lining has been successfully established or constructed in the ditches and/or swales.
- 3.2.11.2. Check Dams greater than 600 mm in depth may seriously impact the flow characteristics of the ditch.
- 3.2.12. Weirs:
- 3.2.12.1. Maintain a minimum depth of 300 mm at all times. Sediment shall be periodically removed per items 3.2.3 and 3.2.5.
- 3.2.12.2. Hay bales shall be placed on the downstream side of the weir at an approximate ratio of 25 bales per 9 meters of weir length to

further reduce erosion. The long dimension of the bale is to be placed parallel to the ditch centerline.

3.2.13. Ditch Sediment Trap:

- 3.2.13.1. The ditch cross-section shall only be partially blocked, in order to minimize the loss in ditch flow capacity.
- 3.2.13.2. The stone berm shall be removed and the sediment pit filled with approved material as soon as the upstream areas contributing to it are stabilized.

3.2.14. Riprap, Plain or Grouted:

- 3.2.14.1. Riprap shall be laid on a geotextile fabric meeting the requirements of Subsections 6.01.08 and 8.19.02 of the 1996 MDOT Standard Specifications for Construction installed over a sand or granular sub-base. Each piece of riprap shall be individually laid by hand.
- 3.2.14.2. Riprap, Grouted shall have the voids between the riprap pieces filled with mortar grout.

3.2.15. Pea Stone Gradation:

- 3.2.15.1. Pea stone shall be gravel consisting of hard, durable particles or rock. Only negligible quantities of clay lumps and roots shall be permitted.
- 3.2.15.2. Sieve Analysis:

<u>Square Sieve Openings</u>	<u>Total % Passing</u>
12.5 mm	100
9.5 mm	95-100
4.75 mm	15-40
2.36 mm	0-12
Loss by washing	0-3

3.2.16. See MDOT Standard Plan R-96 Series for additional details.

3.2.17. All dimensions are millimeters unless otherwise noted.

3.3. Drainage Standards:

- 3.3.1. All materials and workmanship shall be in accordance with WCAA specifications.
- 3.3.2. The Contractor may construct manholes, catch basins and inlets, as detailed, with precast reinforced concrete units provided the following conditions are satisfied:

- 3.3.2.1. All precast sections shall be made in accordance with ASTM C-478 except that:
 - 3.3.2.1.1. The minimum wall thickness shall be 5 inches.
 - 3.3.2.1.2. Base and top slabs shall be as detailed on the Standard Plans, however precast heavy wall sumps meeting the reinforcing requirements for risers and bases may be substituted for base slabs.
 - 3.3.2.1.3. All aircraft Rated precast structure risers and cone sections shall be manufactured in accordance with ASTM C-76 and shall have a minimum 28-day compressive strength requirement of 5,000 psi.
- 3.3.2.2. No openings shall be made in precast units which would remove more than 70% of the circumference along any horizontal plane. A minimum of 6" of undisturbed manhole wall is required between any two openings. Openings may be constructed by casting, removal of green concrete, or by drilling the openings in cured concrete.
- 3.3.2.3. Openings for sewer pipe may be cut or precast with a diameter of 6" larger than the outside diameter of the pipe. The opening around outside of pipes shall be closed using brick masonry.
- 3.3.2.4. Structures not meeting the opening requirements shall be built of block or brick (12" block to be used for Aircraft Rated structures) to a minimum of 8" above the top of sewer, with precast units being used above this point. Where the precast units rest on the block or brick, the groove in the precast unit will be filled with mortar.
- 3.3.2.5. Sewer pipe shall not penetrate a precast cone unless authorized by the WCAA.
- 3.3.2.6. Circumstances encountered during construction may preclude the use of precast unit structures, as determined by the WCAA. If the contractor elects to use precast unit structures and field changes prohibit their use, no compensation will be made to the contractor for having these units manufactured, supplied to the project and not utilized.
- 3.3.2.7. Special precast units for use on large diameter sewers must have the approval of the WCAA prior to installation.
- 3.3.2.8. Precast flat top slabs may be substituted for precast cones.
- 3.3.3. All vertical holes in concrete block structure wall shall be completely filled with mortar. All vertical wall joints shall be buttered.

- 3.3.4. The first pipe length entering or leaving any structure shall be temporarily supported by suitable means until the structure is completed and backfilled.
- 3.3.5. A poured reinforced concrete base may be substituted for a precast base as approved by the Engineer.
- 3.3.6. Brick or block manholes, catch basins or inlets, shall be shrouded with geotextile fabric from the top down 4'-0" minimum. Precast structures shall be shrouded with geotextile fabric to a point 1'-0" below the stack. Enough geotextile material will be left on the top to roll over the brick stack and under the casting.
- 3.3.7. The placement of 6" underdrain stubs in Sewer Trench will be required at proposed drainage structures (see Std. AD16 or AD17). The cost of these lengths of underdrain with end caps shall be included in the cost of the drainage structure.
- 3.3.8. Steps are required for all structures. Steps shall be of an approved design, made of cast iron, aluminum, or plastic coated steel. Rungs shall be a minimum of 10" clear length, designed to prevent the foot from slipping off the end and capable of supporting 800 pounds.
- 3.3.9. Drainage structure units shall not be shipped to the project site (approved for shipping) until the 28-day compressive strength requirement has been attained.
- 3.4. Utilities:
 - 3.4.1. Tenant shall maintain all utilities on the site.
 - 3.4.2. Tenant shall pay all costs of connecting to utilities to the demarcation line.
 - 3.4.3. All utilities must be placed underground.
 - 3.4.4. Rerouting of any existing utility within the lease area is the responsibility of the Tenant.
 - 3.4.5. See Items 6 and 7 of this section for further utility development requirements.
- 3.5. Soil Boring Requirements:
 - 3.5.1. Contractor will not perform borings in the Air Operations Area (AOA) without direct supervision of the FAA. Contractor to make arrangements for FAA supervision with WCAA Inspector.
 - 3.5.2. Utility sweep must be performed by WCAA Maintenance. Order for sweep must be placed 72 hours in advance of work to be performed.

- 3.5.3. Once work is complete, affected pavement must be patched to prevent moisture from entering the base material. Verify requirements with WCAA Inspector.

3.6. Landscaping Requirements:

- 3.6.1. Berms of any kind are not permitted.
- 3.6.2. Proposed landscaping design will be reviewed by the WCAA and must meet the requirements of the WCAA and the FAA.
- 3.6.3. Fencing is not permitted unless specifically authorized by the WCAA.
- 3.6.4. Fencing along roadways or other public areas not adjacent to the AOA shall not contain barbwire. If existing fencing is to be painted, it should be painted with non-metallic black paint or silver to match existing adjacent fencing.
- 3.6.5. Fencing shall not contain any sort of screening material unless authorized by the WCAA.
- 3.6.6. Dumpster/trash storage areas must be screened using materials which will be coordinated with the approved exterior building finishes.
- 3.6.7. All guardrail posts are to be galvanized.
- 3.6.8. See attachment 'A' – Managing Wildlife at Airports for use of plant materials.

3.7. Exterior Signage Requirements:

- 3.7.1. All signage and company logos must be approved by the WCAA before installation.
- 3.7.2. Signage shall be limited to:
 - 3.7.2.1. No more than one (1) single-sided Building Mounted Sign in each lease area. Sign must be solely a corporate identification sign in company colors. This sign shall meet the following requirements:
 - 3.7.2.1.1. Sign must be attached to the building façade
 - 3.7.2.1.2. Sign shall not be larger than 36 inches in height.
 - 3.7.2.1.3. Sign message shall be corporate name and logo only.
 - 3.7.2.1.4. Sign must be internally illuminated.
 - 3.7.2.1.5. Signs shall be in corporate colors
 - 3.7.2.1.6. Text shall be lighter in color than the sign background.
 - 3.7.2.2. No more than one (1) two-sided Site Sign. . Sign must be solely a corporate identification sign in company colors. It may be placed

in the Airport's Rogell Drive Right-Of-Way (ROW). This sign shall meet the following requirements:

- 3.7.2.2.1. Height to top of sign to be 6'-0"
- 3.7.2.2.2. Length of sign to be 10'-0"
- 3.7.2.2.3. Sign Panel sign shall be 3'-0" x 10'-0"
- 3.7.2.2.4. Sign message shall be corporate name and logo only.
- 3.7.2.2.5. Sign must be internally illuminated.
- 3.7.2.2.6. Signs shall be in corporate colors
- 3.7.2.2.7. Text shall be lighter in color than the sign background.
- 3.7.2.2.8. Base of sign may be:
 - A full height sign skirt to enclose the sign support structure. Skirt dimensions to be: Height = 3'-0"; Length = 75% the length of the sign panel (min.); Width = 60% the width of the sign panel (min.)
 - If post and panel sign is proposed it is to be similar to Andco 77 Series.
- 3.7.2.2.9. Base of sign shall be landscaped (see landscaping requirements).
- 3.7.2.2.10. Sign must be set back a minimum of 10'-0" from the roadway curb (unless otherwise directed by the WCAA).

3.7.2.3. No more than one (1) uniform Entrance and Exit Signs at each curb cut designated for use by the public. These signs may be up to 16" wide x 16" high. The Authority must approve text of these signs.

3.7.3. Flashing, moving, changing copy or intermittent type signage is prohibited. Signage shall be maintained stationary and constant in text and color at all times.

3.7.4. Provide sign details and specification to the WCAA including sign materials, frame and cabinet construction, electrical and lighting, foundation, anchoring and mounting, text size, etc.

3.7.5. Building Mounted Sign and Site Sign graphics must be similar with text proportions, color and design to be the same for all signage.

3.8. Exterior Lighting Requirements:

3.8.1. All exterior lighting shall illuminate the general area of the specific site and shall be shielded to reduce glare to vehicles on roadways and aircraft.

- 3.8.2. Exterior lighting shall be directed toward the ground areas of lawns, parking areas, service areas, or special features of the site with angle of illumination at or less than 45 degrees from horizontal.
- 3.8.3. Illumination of signage must be accomplished through back-lighting.
- 3.8.4. Flashing, moving, changing copy or intermittent type lighting is prohibited. Artificial light shall be maintained stationary and constant in intensity and color at all times when in use.
- 3.8.5. Upward lights (including temporary lighting for special events) are strictly prohibited.
- 3.8.6. Exterior lighting design and specifications (including locations and exact heights of each pole) should be included on the documents that accompany FAA Form 7460-1.
- 3.8.7. Parking Area Lighting:
Unless otherwise approved by the WCAA, the following shall apply:
 - 3.8.7.1. Fixtures shall be 400-watt metal halide lamps, rectangular shaped aluminum housing with hinged aluminum doorframe, with clear heat tempered glass lens and dark bronze anodized finish. A maximum of (4) fixtures per pole may be installed.
 - 3.8.7.2. All light fixtures and bases must be located within the lease area and meet all security requirements.
 - 3.8.7.3. Height of concrete bases shall not exceed 3'-0" unless otherwise approved by the WCAA.
 - 3.8.7.4. Height from top of pole to top of base shall be 35'-0".
 - 3.8.7.5. Poles to be painted or factory finished metallic dark bronze to match fixture.
 - 3.8.7.6. Provide documentation that lighting assembly complies with requirement to withstand 100 MPH wind load.

3.9. Height of Buildings and Structures

- 3.9.1. Buildings may be two-stories, with the maximum height of the structure approved by the WCAA.
- 3.9.2. Other structures on the site are limited to one-story, with the maximum height of the structure approved by the WCAA.

- 3.9.3. Any equipment mounted on the roof must be properly screened and shall be included in the maximum building/structure height.

3.10. Required Setbacks and Clear Areas:

- 3.10.1. All buildings and structures must meet the following setback requirements unless otherwise noted in this section.

- 3.10.1.1. Front Yard Setback = 100 feet
- 3.10.1.2. Rear Yard Setback = 40 feet
- 3.10.1.3. Side Yard Setbacks = 25 feet (each side)

Note: For corner sites the frontage on the two (2) roads must meet the Front Yard Setback requirement unless otherwise directed by the WCAA. Special consideration of setbacks may be given by the WCAA pending a submittal from a licensed surveyor.

- 3.10.2. Allowable Structures within the Setback Areas

- 3.10.2.1. Guard Booths are allowed within the front and rear setbacks. Guard booths within the set-back area is limited in size to 10'-0" x 10'-0".
- 3.10.2.2. The number of booths within the set-backs are limited to two (2).
- 3.10.2.3. No other building or structure (including canopies over the car gas-up areas will be permitted within any set-backs.
- 3.10.2.4. Corner Clearance: No fence, wall, shrubbery, sign, or other obstruction to vision above a height of three (3) feet from the established road grades shall be permitted within the triangular area formed at the intersection of any road right-of-way lines by a straight line drawn between said right-of-way lines at a distance along each line of twenty-five (25) feet from their point of intersection.

3.11. Site Access and Development Requirements

- 3.11.1. Curb cut width must be approved by the Authority, but under no circumstance shall a single curb cut be over 160'-0" in width.
- 3.11.2. Additional curb cuts, if required, will necessitate a traffic study to be performed by a professional traffic control engineer to determine optimal locations given the roadway design to speed limit and line of sight.

4. Architectural

4.1. Exterior Finishes and Materials

- 4.1.1. The exterior of all buildings shall be constructed with a harmonious blend of materials to provide an aesthetically pleasing exterior. Allowable materials are:
- 4.1.1.1. Brick
 - 4.1.1.2. Natural Stone
 - 4.1.1.3. Decorative concrete masonry
 - 4.1.1.4. Glass
 - 4.1.1.5. Aggregate panels
 - 4.1.1.6. Metal panels
- 4.1.2. The WCAA may permit pre-engineered structures or modular building systems after review if the building or structure is:
- 4.1.2.1. a custom design; and
 - 4.1.2.2. utilize only the above materials on the exterior.

4.2. Interior Finishes and Materials

4.2.1. General

- 4.2.1.1. The Tenant shall provide interior partitioning, painting and decorating, floor coverings, store fixtures and furnishings as accepted by the WCAA. The WCAA reserves the right to reject any Tenant proposed finishes and materials which in the WCAA's opinion are considered to be in aesthetic conflict with the existing facility finishes, and/or adjacent approved Tenant finishes.
- 4.2.1.2. All work by the Tenant within the Premises shall be completed with new materials. All materials and workmanship shall be of a uniformly high quality and performed in accordance with the very best standards of practice (in any event not less than WCAA's base building standards).
- 4.2.1.3. Any damage to the Premises caused by the Tenant or any of its employees, contractor(s) or workmen shall be repaired forthwith by and at the expense of the Tenant.
- 4.2.1.4. Food preparation areas are required to have impervious, non-slip flooring materials.
- 4.2.1.5. Lumber used in rough carpentry or framing shall be treated with a fire retardant chemical and shall carry appropriate U.L. or equivalent marking.

4.3. Door Keying

- 4.3.1. All doors must have locksets capable of accepting a 7-pin "Best" core.
- 4.3.2. Projects constructed by the Airport must be provided MX-8 Best cylinders for each door and 5 blank keys per lock. These items will be turned over to the Maintenance Division.

5. Heating Ventilation and Air Conditioning Equipment

- 5.1. Cooling equipment in the Tenant's space will be in the form of variable air volume terminals or fan coil units if required. Each will provide cooling for solar transmission, lighting, miscellaneous electrical and people loads.
- 5.2. The WCAA shall provide a 5 lb. natural gas cap-off with isolation valve, for food court and restaurant Tenants. Information meter and a pressure-reducing valve (PRV) are the responsibility of the Tenant. Meters shall conform to WCAA standards.
- 5.3. HVAC systems in the Tenant's space will be balanced by a certified air-balancing contractor as part of the Tenant's renovation work at Tenant's expense.
- 5.4. Supply air, return air and sanitary exhaust distribution ductwork, ceiling diffusers, registers, grilles and ceiling fire stop flaps, smoke detector/pilot light, and any other equipment required by code and the WCAA, within the Premises for the HVAC system, shall be carried out by the tenant's contractor.
- 5.5. Final mounting location of thermostat(s) shall be by the Tenant.
- 5.6. Acoustic criteria: Acceptable HVAC noise levels in the Premises shall be noise criteria (NC) 35-40.
- 5.7. Environmental control units for food court and restaurant Tenants, where grease and smoke generating equipment is permitted by the WCAA, shall be provided by Tenant at WCAA's designated locations.
- 5.8. The Tenant must provide the WCAA access within its Premises to all damper controls on ducts supplying air to public areas and to the Premises.

6. Plumbing

- 6.1. Any additionally required water utilities needs for development are the tenant's responsibility.
- 6.2. The Tenant shall provide and pay for branch plumbing lines complete with plumbing fixtures required by the Tenant to serve its Premises including grease interceptors and gas information meters. No grease shall be allowed to go into the Airport's plumbing/sanitary system.

- 6.3. The Tenant shall provide and pay for installation of hot water heater or heaters complete with all related plumbing, mechanical and electrical. Gas fueled hot water heaters are preferred.
- 6.4. Tenants with drainage loads from food and beverage or related operations will be required to install grease interceptors which shall be mounted above the floor and within the Tenant's space. The Tenant will maintain grease interceptors at the Tenant's expense.
- 6.5. All grease traps should be located as close to fixtures or drain as possible and located such that they are fully accessible from the top cover.
- 6.6. All domestic water lines are to be insulated with a minimum of 1½" fiberglass insulation and a vapor barrier.
- 6.7. All copper piping shall be type 'L'. All vent lines shall be DWV copper or cast iron. Plastic piping will not be permitted.
- 6.8. Water usage will be metered by the WCAA. Water meters, shall be installed at the Tenant's expense, in an accessible location for billing purposes. Meters shall conform to WCAA standards.
- 6.9. The Tenant's hot water tank pan and relief valve shall be piped to a floor drain.
- 6.10. The Tenant or the Tenant's contractor(s) shall not install additional plumbing through the structural floor slab without prior written approval from the WCAA.
- 6.11. All floor penetrations around pipes, conduits, ducts, etc. between levels must be sealed against water, smoke, and flame penetration using firestop materials listed by an accredited testing agency and meeting a minimum of 2-hour rating.
- 6.12. All plumbing vent lines are to be group vented.
- 6.13. For those Tenants that are located in an open area without access to a ceiling space, the sanitary vent cap-off shall be located below the floor using an island vent system in conformance with applicable codes for connection of the sanitary vent.
- 6.14. "Y" clean outs and cast iron "P-traps" shall be supported, and shall be made accessible at all times.
- 6.15. Connections to domestic water lines shall be installed with backflow prevention valves where required by the applicable plumbing code.
- 6.16. All existing plumbing lines not being re-used are to be capped or terminated at the source of origin. See WCAA Inspector for further clarification if needed.
- 6.17. All hose bibs and slop sinks with hoses attached shall have applicable screw on vacuum breakers attached.

- 6.18. Water meters to be off an existing metered line and shall be located in such an area that is readily accessible for the purpose of meter reading and maintenance, and clearly identified. All new water meters installed will have a back flow preventer down stream of the water meter service internal to the facility. Verify make and model with the Airport Inspector.
- 6.19. All pre-cast concrete sections shall be made in compliance with WCAA specifications and clearly marked as compliant.
- 6.20. All water mains shall be class 54 pipe 250psi rated. Thrust blocking is required on all bends in the underground water supply system.
- 6.21. All materials used for sanitary and storm sewer lines shall comply with WCAA standards and specifications.
- 6.22. Maintain a minimum separation of 10' between sanitary or storm to the water main. Minimum 18" separation shall be maintained for cross over of water and sewer pipes with the water main on top.
- 6.23. Cross connections between potable and other water systems is not allowed.
- 6.24. All underground pipe and structures must comply with WCAA specifications and be clearly marked. Any structures or pipe utilized inside the AOA must be aircraft rated. Copies of certifications for all pipe and structures shall be submitted to airport inspector's office prior to installation.
- 6.25. Bacterial and pressure tests on all underground pipe work shall be completed prior to permanent covering of the site and copies of all test result will be submitted to WCAA Inspector's office as soon as they become available.
- 6.26. All underground components of any water supply system (water mains, valves, thrust blocks, T's, etc.) shall comply with the WCAA's utilities standard.
- 6.27. Sanitary pumps are to be Vaughn Chopper pumps.

7. Electrical Requirements

7.1. Power Service Requirements:

- 7.1.1. The Tenant will be responsible for providing all required power from the service line to the structure.
- 7.1.2. The Tenant shall ensure that all wiring for lighting, power, fire alarm, telephone, data, television and low-tension systems within walls and ceiling plenums is installed in metal conduit or metal raceways or cable trays. No exposed wiring is allowed and ¾" conduit minimum shall be used.
- 7.1.3. All materials shall be new, UL approved or equivalent and shall be of a standard not less than the Premises.

- 7.1.4. All wiring shall be copper. Branch wiring shall be minimum #12 gauge solid (stranded for #8 or larger). All wiring must be installed in conduit. BX cable may be used in partition walls with no horizontal runs around corners of walls and in ceiling for drops (maximum 10') from the junction boxes to the light fixtures. Daisy chaining with BX wires between light fixtures is not permitted.
- 7.1.5. The Tenant must provide balanced electrical load in all three phases of the distribution system to within 5%.
- 7.1.6. Exhaust fans and make-up air units if required by Tenant must be interlocked and interfaced with the base building fire alarm system.
- 7.1.7. All life safety devices within the Premises to be in accordance with code. Tying-in of the Tenant's fire suppression system to WCAA Fire Department's central dispatch is the Tenant's responsibility.
- 7.1.8. All equipment and light fixtures shall be energy efficient.
- 7.1.9. Metering of electrical services is required, is the Tenant's responsibility and provided locally at each concession outside the view of the public and in an easily accessible location a maximum of 60" above finish floor elevation. Electrical meters shall conform to WCAA standards.
- 7.1.10. Flex CBX Electrical Cabling is only permitted in stringing lights and other areas permitted by the WCAA Inspector.
- 7.1.11. Zip ties to all conduit/interduct must attach identification plastic tags at intervals of not more than 20 feet on center.
- 7.1.12. All junction boxes shall be numbered to identify the source of power (breaker) in the new panel boards.
- 7.1.13. All existing electrical, lines not being re-used are to be capped or terminated at the source of origin. See WCAA Inspector for further clarification if needed.
- 7.1.14. Any electrical meters installed in the scope of this project shall be located adjacent to the power supply service panel, clearly identified and made readily accessible for the purpose of meter reading and maintenance.
- 7.1.15. Provide 3-days advanced notice to WCAA Electrical Department to mark airport electrical prior to the commencement of work. Notification is the responsibility of the contractor.
- 7.1.16. All primary power feeds to building shall have a 6" concrete buffer on top and red caution tape 6" below finish grade.
- 7.1.17. All underground conduits shall be rigid or schedule 80 rigid. Red caution tape shall be used 6" below finish grade the full length of trench for identification.

- 7.1.18. No direct burial cable or black vinyl pipe shall be allowed.
- 7.1.19. Electrical wires, cables and optical fiber cables shall be listed as noncombustible or limited combustible and have a maximum smoke developed index of 50 or shall be listed as having a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.5 m (5 ft) or less when tested in accordance with NFPA 262. NFPA 90A 4.3.10.2.6.1.

8. Utility Metering Standards

- 8.1. The Tenant will be responsible for ensuring compliance with all WCAA utility metering requirements for assigned space(s) per the following requirements:
 - 8.1.1. Electrical metering will be located in the Tenant space. The WCAA approved electrical utility meter is the Shark Model #200-EN2-TS-RLB by Electro Industries, Inc.
 - 8.1.1.1. The Tenant shall provide interfacing wiring with the installed base building utility system and WCAA Ethernet. All Tenant electrical submeters are to be the meter specified above.
 - 8.1.1.2. The Tenant shall provide a primary rated current transformer.
 - 8.1.1.3. The current transformer to be rated 0.3% accuracy or better.
 - 8.1.1.4. The current transformer to be rated equal to or greater than the associated feeder circuit breaker trip rating.
 - 8.1.1.5. The current transformer to have a 0-5 amp full scale rated output.
 - 8.1.2. The WCAA approved water utility meter is the Neptune Technologies Model # TBD based on service size and application. A Tricon /S register is required for each meter to direct read in cubic feet. The register shall provide one contact closure per cubic foot of water use. The water meter to be appropriately sized for the demand of the Tenant space and address the following:
 - 8.1.2.1. The Tenant must also provide appropriate backflow devices per WCAA requirements. (See Exhibit B of this document).
 - 8.1.2.2. The water meters must be equipped with "Direct Read" dials measuring in cubic feet. The meter must be set to be readable from floor level.
 - 8.1.3. The WCAA approved natural gas utility meter is the AMCO Inc. Model # TBD based on service size and application.

- 8.1.3.1. The meter must provide a direct register reading in cubic feet and one contact closure per cubic foot of gas use.
 - 8.1.3.2. The meter must be set to be read from floor level.
 - 8.1.3.3. Natural gas information meter and a pressure-reducing valve (PRV) are the responsibility of the Tenant and must comply with WCAA requirements.
 - 8.1.3.4. NOTE: This is only required for leased spaces within facilities where the Airport Authority is the primary user. If the Tenant has a direct contract with the utility company for natural gas, the utility company requirements will supersede this requirement.
- 8.2. Tenant must submit a cash security deposit to the WCAA Finance department in the amount of \$5,000. Once the Tenant has met all metering requirements of this section, the WCAA will refund the security deposit upon acceptance of the WCAA approved agent performing final inspection, calibration (if required) and testing.
- 8.3. All utility meters and all associated equipment shall have remote reading capabilities and be compatible of interfacing with the base building utility system and the WCAA Ethernet. The tenant is responsible for meter communications wiring from the tenant space to the base building communications room and shall comply with data wiring requirements specified in the TCDM.
 - 8.3.1. All remote metering interfaces for water and gas meters shall be wired to the space electric meter enclosure in conduit.
 - 8.3.2. Pulse communication type interfaces shall be reviewed by the Authority for compatibility. Final connection of pulse meter wiring to the electric meter inputs shall be verified by the WCAA before approval.
- 8.4. A WCAA approved agent will perform all utility meter inspection, testing and certification to ensure compliance with WCAA requirements prior to operation in assigned Tenant space.
- 8.5. All utility meters for the monitored services will have properly sized inlets for gas and water meters. If the meter(s) does (do) not have a properly sized inlet for the available supply source, the WCAA reserves the right to direct the contractor to change out the meter(s) and replace it (them) with one(s) having a properly sized inlet, at the Tenant's expense.
- 8.6. All utility meters must be accessible with proper clearances for proper testing and calibration.
- 8.7. Meters must be located within the Tenant space it is servicing and out of view of the public. Meters must be located no higher than 5'-0" above the finished floor of the assigned Tenant space. Under no circumstances will any utility meter be located above the ceiling of an assigned Tenant space without prior written authorization from the WCAA.

- 8.8. The Tenant is responsible for all costs associated with verifying and connecting to the closest utility source if it is not located within their assigned space.
- 8.9. In order to allow for proper testing and certification, all meters for the assigned Tenant space must be installed a minimum of two weeks prior to the date of substantial completion.

9. Roofing Standards

9.1. General Requirements:

These Guidelines require 4-ply cold tar roofing. If tenant desires PVC roofing, tenant must provide the Airport with a copy of the "Approved Inspection and Warranty Certificate" for verification that roof meets these Guidelines (20 year bondable roof).

- 9.1.1. Tenant or their contractor must provide drawings to the WCAA for review and approval prior to modifying any roofing system.
- 9.1.2. A modification of roofing systems cannot commence without prior written approval from the WCAA.
- 9.1.3. Installed roofing system is to be 20 year bondable.
- 9.1.4. Installed roofing system must be resistant to minimum 90 mph. Uplift as well as resistant to exposure to jet fuel.
- 9.1.5. Contractor must supply MSDS of all roofing components to Airport Inspector.
- 9.1.6. Ensure all components of the roofing system are installed per manufacturer's specifications. Deviations from or changes to the submitted components must be submitted to the WCAA prior to approval.
- 9.1.7. The WCAA prohibits any use of cranes to lift materials to the roof surface without prior written authorization from the FAA and/or the WCAA.
- 9.1.8. Provide a copy of final manufacturer's approval of installed roofing system and all warranties and guarantees per WCAA requirements.
- 9.1.9. If scupper and roof drain downspout locations have changed, ensure drainage is either draining directly into a storm drain or does not cause ice damming in the downspouts or ice sheeting in pedestrian areas.
- 9.1.10. Provide information on maintenance plan installed new roofing system.
- 9.1.11. Contractor to use manufacturer approved details for all roof applications.
- 9.1.12. Completely separate from the roof surface equipment, conduit, lightning protection or any other component that is not part of the roofing system.

9.2. New Roofing Requirements:

- 9.2.1. Roof decking must be free of obstructions and defects.
- 9.2.2. Provide proper support and flashings for all penetrations.

9.3. Roofing Replacement Requirements:

- 9.3.1. The WCAA recommends completely removing existing roofing systems prior to application of any new roof.
- 9.3.2. Upon WCAA review and approval, the Tenant may install a new roof over existing roofing systems, provided the following conditions:
 - 9.3.2.1. If applicable, remove all existing ballast completely from the existing roof surface prior to application of new roofing system or system components (such as flashings, roof ply, etc).
 - 9.3.2.2. Remove and reset all roof drains and strainers located within the scope of work.
 - 9.3.2.3. The Tenant or their contractor provides to the WCAA Inspector a copy of an infra-red scan of the existing roofing system within 24 hours of a rain storm or a water saturated condition on the existing roof surface.
 - 9.3.2.4. If the existing roofing system contains any damaged or water-logged insulation, remove and replace any damaged roof decking/insulation with materials to match existing.
 - 9.3.2.5. The contractor agrees to cover within their roof warranties all remaining roofing components including, but not limited to underlayment and insulation as well as any other integral roof system component including but not limited to roof drains, scuppers, flashings, drip caps, gravel stops, etc.
 - 9.3.2.6. Completely remove and replace all flashings, parapet caps, gravel stops, etc.
 - 9.3.2.7. Ensure all roof decking/insulation (existing and new) is properly fastened.

10. General Pavement Standards

- 10.1. Roadway design must be in compliance with all MDOT standards.
- 10.2. All materials used should be on the MDOT Qualified Product List.
- 10.3. The applicant must document the existing conditions (i.e. thickness of pavement, thickness of aggregate base, presence of moisture, etc.) at locations of removed pavement and submit a report to the WCAA in a timely manner.
- 10.4. All cuts to existing pavement shall be full depth. All slurry shall be cleaned up immediately upon completion. No dry cutting will take place in high traffic areas. The Airport Inspector as to the process will evaluate this.

- 10.5. Asphalt pavement
 - 10.5.1. For parking areas, the WCAA recommends a minimum of 6" sub base compacted to 95% maximum unit weight., 3.5" asphalt base and 1.5" wearing course fine.
 - 10.5.2. Apply tack coat at a rate of 0.10 Gallons per square yard in between each layer of asphalt pavement.
- 10.6. For roadways and heavy traffic areas, the WCAA recommends 12" concrete to have 12" 21AA aggregate sub base placed in 2 lifts and compacted to 95% of maximum unit weight.
- 10.7. Testing of all bituminous material, concrete, stone and compaction shall be the obligation of the contractor. A tester shall be on site during the application/installation of all Bituminous material and concrete. Copies of test results and batch tickets shall be submitted to airport inspectors' office as soon as they become available.
- 10.8. Hanger aprons shall slope away from the level of the hanger floors to prevent liquid on the apron surface from flowing into the hangers. NFPA 409, 8.1.4

11. Airfield Requirements

11.1. Equipment:

- 11.1.1. All taxiway and edge lighting shall be placed at a height complying with FAA and these Guidelines.
- 11.1.2. All hand holes shall be clearly identified and circuits shall be tagged in compliance with airport maintenance requirements.

11.2. Pavement:

Requirements pending input from Planning, Design and Construction as well as the Facilities and Infrastructure Divisions.

11.3. Pavement Markings:

- 11.3.1. All existing markings must be completely removed prior to application of any new striping.
- 11.3.2. 20' minimum wingtip clearance must be maintained at all times between all parked aircraft.
- 11.3.3. Tenant is responsible for all pavement markings associated with aircraft operation (including lead-in lines, centerlines, wheel stops, etc.). Airlines operations will not interfere with established WCAA operations areas unless previously approved in writing by the WCAA.

11.4. General Airfield Electrical:

- 11.4.1. The counterpoise shall be positioned accordingly:

- 11.4.1.1. 8" above the duct/duct bank (including concrete) centerline with installed at right angles to or under pavement or in grassy area.
- 11.4.1.2. 8" above the duct/duct bank (including concrete) on the side of the duct/duct bank running parallel with the pavement and the duct/duct bank is within 20' of the pavement edge.
- 11.4.1.3. Exceptions may have to be made to the above. Under full strength pavement, the 8" will vary, dependent upon base and pavement thickness.
- 11.4.2. The minimum distance between top of conduit in duct bank and counterpoise is eleven (11) inches.
- 11.4.3. Contractor shall install a 200 pound polypropylene pull rope/string in each duct and conduit installed and plug or cap the duct. The rope shall be securely attached to the pull iron in each handhole/manhole.
- 11.4.4. Install a red plastic six (6) inch wide marking tape 12" above duct bank and above all portions of duct banks and conduit not installed under airfield pavement.
- 11.4.5. Duct banks shall drain toward the handholes/manholes with the crown of the duct bank midway between structures. The duct slope shall be three (3) inches minimum per one hundred (100) feet, unless otherwise specified.
- 11.4.6. Coordinate duct bank installation with new circuiting and sign plans.
- 11.4.7. Two (2) 2" PVC sleeves shall be installed in each wall of every handhole, according to Detail C of Standard AE4. The sleeves shall be positioned 24" minimum below the ground level to the top of the sleeve. These sleeves are for present and future use.
- 11.4.8. All PVC conduit and fittings shall conform to federal specification W.C – 1094 and shall be U.L. listed.
- 11.4.9. Install PVC plugs in all empty sleeves and ducts.
- 11.4.10. Handholes/Manholes shall be located as shown on the plans. The placement depth of the handholes may vary (i.e. increase or decrease the courses of brick stack) to accommodate the duct banks.
- 11.4.11. Ground all metallic parts of the handhole/manhole, excluding casting, with a #6 AWG bare stranded copper wire.
- 11.4.12. All handholes shall be provided with a cable rack per Detail D of Standard AE4, located 6" above the floor of the handhole.
- 11.4.13. A pulling iron as shown in Detail B of standard AE4 shall be provided in each handhole/manhole opposite each conduit entrance. The pulling iron will be positioned 4" below the level of conduit or window.

- 11.4.14. All reinforcing steel shall be ASTM A615 Grade 60 and the concrete shall be Grade AA with a 28-day compressive strength of 4,000 psi. All handholes shall be precast and brought to the site for installation. Cast-in-place may be used, after review and approval of the Engineer.
- 11.4.15. All wall reinforcement affected by ductwork shall be relocated on either side of the duct. The contractor shall submit rebar placement around duct banks prior to handhole fabrication.
- 11.4.16. The contractor shall submit shop drawings showing all reinforcing steel and other construction details prior to fabrication.
- 11.4.17. In the event any handhole cover is not installed when box is placed, the contractor shall take necessary measures to assure safety. The safety measures shall include, but not be limited to, barricading the handhole site.
- 11.4.18. All manhole and handhole castings shall be set 3" above the finished grade for the surrounding area. Asphalt or sodding, as called for on the plans, shall be placed flush with the top of casting and gently sloped away from the structure to prevent the ponding of water.
- 11.4.19. Each handhole shall include the furnishing and installation of a ¾" diameter by 10' minimum long ground rod. Each ground rod shall be individually tested prior to connection to the counterpoise or ground grid to obtain a not-to-exceed earth resistance of 25 Ohms. Additional sections of ground rod shall be added to achieve the 25 Ohms requirement.
- 11.4.20. All manhole and handhole covers shall have surface lettering as follows: "Field Lighting" or "F" as approved by the WCAA.
- 11.4.21. Trench backfill for ducts and duct banks shall be in accordance with Trench A or B as it applies, except that the porous backfill in Trench A shall be placed a minimum of 12" above all ducts and duct banks. Manhole and handhole backfill shall be in accordance with the "Drainage Structures" specification.
- 11.4.22. All knockout windows in manholes/handholes shall be reinforced with two reinforcing bars, 2" spacing, each way along each side of windows. Bar size shall be same as in wall reinforcement.
- 11.4.23. Handholes shall have a tag installed like the manhole tag shown on Std. AE3.

12. Security Equipment

12.1. Security Card Access System Requirements

Installation or relocation of Security Card Access System (SCAS) components must meet the following criteria

- 12.1.1. Installation of any SCAS component shall be by a contractor authorized by the Security Access Control Maintenance Manager. Contact Craig Vander Wal, (734-247-7378) for installation requirements and additional information.
- 12.1.2. All parts and equipment associated with the access control system must be approved by the Security Operations Manager prior to installation. Installation shall include all CCTV and graphics interfacing and SCAS programming.
- 12.1.3. The permit holder is responsible for all costs associated with installation of the Security Card Access System equipment.
- 12.1.4. The permit applicant shall obtain a 1 year warranty on all parts and service associated with the SCAS equipment and installation.
- 12.1.5. The system shall be designed and installed to prevent tampering with any of the SCAS components. This includes, but is not limited to, tamper resistant screws, tamper switches and key locks.
- 12.1.6. All wiring shall be in conduit and unless otherwise approved, **may not be exposed.**
- 12.1.7. The permit holder shall submit an addendum to the permit indicating the SCAS installation specifications and layout prior to start of work and shall provide As-Builts of the SCAS installation. The drawings shall be in AutoCAD format version 14 or higher.
- 12.1.8. All SCAS doors shall have door handles on both sides of door.
- 12.1.9. All fire rated SCAS doors require latching hardware per Fire Code.
- 12.1.10. As part of Permit Close-Out, the Security Operations Manager will complete and authorize a Performance and Installation Completion Form as part of the equipment and installation test. Unless otherwise approved by a Security Manager, the equipment may not be utilized until it is tested.
- 12.1.11. If an opening is made that would allow access into a Secure Area, the contractor shall erect a partition to prevent access from the public area until the SCAS door/gate has been approved and passed operational testing. The contractor shall not install any openings/doors that would allow access to the AOA unless approved and tested by WCAA Security.
- 12.1.12. Power for all SCAS components shall be routed to a dedicated breaker panel with generator hook-up. Contact WCAA Security for generator load requirements and connector specifications.
- 12.1.13. Fire System Interface
 - 12.1.13.1. The fire system output for releasing the doors in an alarm state shall be interfaced with the Airport's SCAS panels in the specific

zones. The fire system shall provide an alarm output relay for both alarming and monitoring of the fire system status directly from the SCAS.

12.1.13.2. The permit holder shall install either a key switch or output relay (controlled from the SCAS) to override the fire system while the system is undergoing maintenance or should a system failure occur.

12.1.13.3. When the fire system activates, the system may release power to the maglock in the specific zone. All other functions of the card reader and door status monitoring shall not be affected.

12.2. AOA Fencing Requirements

12.2.1. Prior to removing any existing AOA perimeter fencing, a permanent or temporary fence must be in place and have been inspected by Airport Security.

12.2.2. The permit holder may choose to fence the construction site off the AOA. The permit holder must submit plans for temporary access with fence layout and phasing plan to WCAA Security for approval.

12.2.3. The contractor or his employees shall not cut, remove or displace any AOA perimeter fencing without prior approval or notice to the WCAA Security.

12.2.4. To allow proper clearance for WCAA Fire Department and WCAA Maintenance equipment, all vehicle gates shall allow a minimum clearance of sixteen feet (16').

12.2.5. To prevent the gates from sagging, there shall be support cross braces for a minimum of two sections on either side of the gate.

12.2.6. To comply with 49 CFR 1542.207, all manual AOA gates shall have an "Intellikey" locking mechanism installed. Contact Craig Vander Wal, Security SCAS Maintenance Manger @ (734) 942-4571 for further information on parts and components.

12.2.6.1. The fence post the mechanism is attached to is to be 2 inches diameter.

12.2.6.2. A spacing of no less than 3.75 inches and no more than 4.5 inches is required between gate posts to allow for adequate clearance for the mechanism.

12.2.7. Any AOA fence that is displaced whether temporarily or permanently, or any AOA fence must be 10 (ten) foot, 9 gauge Class II chainlink, with top and bottom tension wires (**No Top Rail**). The fence shall be topped with dual, "V" Type, outriggers with a minimum of three (3) strands of barbed wire on each outrigger. The fence fabric is to be placed on the public side of the poles. The contractor must contact WCAA Security the day before removing the fence. Decorative wrought iron fence is an acceptable alternative. The

wrought iron fence must be at least 10' (ten feet) high with an additional height to support the curving in the same direction as an outrigger.

- 12.2.8. No gap of 3" or greater from the bottom of the fence or gate to the ground, or between gate leaves is permitted.
- 12.2.9. Barbed wire (Christmas tree configuration) shall be installed at all junctions where different height of fence has been created by this project.
- 12.2.10. To prevent erosion concerns all fence shall be installed with at least 3 feet of flat ground on either side.
- 12.2.11. All posts shall be secured with concrete.
- 12.2.12. To prevent damage, guardrail shall be placed three feet from the AOA fence in all parking areas. The guardrail is to be of sufficient height to prevent semis and other large trucks from backing into or along the fence.
- 12.2.13. Guardrail or protection posts are required in areas where the fence's proximity to the roadway or turning areas could potentially result in damage to the fence due to vehicular traffic.
- 12.2.14. In place of guardrail, anchored concrete parking bumpers (bumpers are to be a minimum of 12" high by 16" deep) may be installed. Bumpers are to be placed a minimum of four (4) feet from the AOA fence in areas that allow public parking. The bumpers will be required to be placed further from the fence in locations where trucks park. In lieu of parking bumpers, curbing may be placed six (6) feet from the AOA fence in all parking areas along the AOA fence (further for truck parking). Guardrail or other associated protection may be required in high traffic or other areas determined by the Airport Security at risk of damage from vehicles or equipment.
- 12.2.15. All non-parking areas or driveways adjacent to the AOA fence shall have "NO PARKING" signs installed every 100 feet.
- 12.2.16. The contractor shall install "Restricted Area Keep Out" signs every 100' on the Public Side of the fence and on all gates. Sign shall be the same size and design as existing Airport signs. Additional signs shall be installed on any gates. (Red reflective background with White lettering. Sign size shall be 12" by 24")
- 12.2.17. All culverts, drains, or piping must be secured with grating to prevent pedestrian access. Piping diameter of 14" or greater that extends from the public to the secured area must also be secured by means approved by WCAA Security.
- 12.2.18. Fence that is installed within 3 feet of a power, telephone or other communication pole or device that could be used to climb over the fence shall be installed with an anti-climb device.

- 12.2.19. Landscaping shall not be placed in areas that would prevent monitoring of the AOA fence from perimeter roads or CCTV systems. Landscaping shall not be placed in areas that would create a climb point or may cause further decay or damage to the fence due to vegetation, roots or other growth.

12.3. Contract Guard Service Requirements

The following requirements apply if guard service is required to monitor any access point during construction:

- 12.3.1. The Contractor shall utilize the WCAA's Contract Guard Service.
- 12.3.2. The guard service shall be provided at the contractor's expense. The contractor must complete the Guard Service Request Form prior to service being provided.
- 12.3.3. Guard requests must be made at least 48 hrs. in advance. A cancellation fee may apply without proper cancellation notice.
- 12.3.4. Guard service will **only** be provided at gates where an existing booth and Security Card Access System are in place. If the contractor requires access at any other gate the contractor shall supply a guard booth as specified below. The WCAA may (if available) provide the Airport's portable guard booth. The contractor or permit holder will be responsible for maintenance of the booth during the duration of the project. In addition, the contractor or permit holder will be responsible for providing power to the booth via generator and maintain the generator (including fuel) for the duration of the project.
- 12.3.5. The contractor may be required to supply an addition guard to perform vehicle inspections for any access point that will be manned.
- 12.3.6. On a case-by-case basis, with WCAA Security approval, guard service may be provided without a guard booth if the request is for "one time" access with a period of less than 8 hours. The Contractor will be responsible for all vehicle expenses incurred by the guard service company.

12.4. Guard Booth Requirements

When a guard booth is required for access into the secured area, the following requirements apply to the booth:

- 12.4.1. The booth shall be designed and fabricated with the door and windows similar to existing checkpoint booths (see checkpoint booth at Gate 33). Booth design and layout and shall be approved by WCAA Security prior to fabrication and installation.
- 12.4.2. Booth shall be a minimum of 8' (length) by 4' (width) in size.
- 12.4.3. Provide a phone and phone service to the booth (at contractor's expense).

- 12.4.4. Booth shall be equipped with heater and air conditioner.
- 12.4.5. Install a minimum of 2 interior duplex 110VAC outlets (Ground Fault Protected).
- 12.4.6. Install two exterior spotlights on each corner of the booth.
- 12.4.7. Install dual mirrors on the inbound and outbound side of the booth.
- 12.4.8. Install a gate arm operators. The gate arm operator switch shall be installed at the front counter. Switches include automatic gate overrides in a card reader secured NEMA enclosure when applicable.
- 12.4.9. Install a two-way radio with exterior antenna. Radio shall be a Motorola MCS 2000 with power supply and base station option. The radio is to be delivered to the WCAA for programming and installation. Contact J. Osborn, WCAA Central Communications (734 942-5300), for specific model numbers.
- 12.4.10. Provide Independent CCTV coverage (see CCTV requirements).
- 12.4.11. Provide all necessary signs including Stop, Restricted Area, No Pedestrian Access, Wait until Gate is Clear, and/or any other signs necessary.
 - 12.4.11.1. Install a "Stop - Wait Until Traffic is Clear" sign mounted on the inbound lane, twenty-five feet (25') prior to booth, with a white Stop-Line painted on the ground adjacent to the sign.
 - 12.4.11.2. Install "Stop" signs adjacent to the gate arm operators on the inbound and outbound lanes.
 - 12.4.11.3. Install "Wait Until Gate is Closed Before Proceeding - No Tailgating" sign on both sides of the inbound and outbound automatic gate leafs.
 - 12.4.11.4. Install "Restricted Area – Keep Out" on each gate leaf.
 - 12.4.11.5. A "Restricted Area - No Public Access" sign shall be mounted on the top front of the booth facing the public side. The sign shall be the same size and design as other checkpoint booth signage.
- 12.4.12. Provide readers to be used with the Airport's Card Access System. The readers shall be interfaced with "Authorized" and "Denied" indicator lights located inside the booth that shall illuminate upon authorization or denial from the SCAS.
- 12.4.13. All equipment shall be approved by the WCAA Security prior to installation and operation. Contact WCAA Security for detailed specifications of the above equipment.
- 12.4.14. The inbound gate arm operator switch shall be installed at the front counter on the inbound side of the booth and the outbound switch on the outbound side of the booth.

- 12.4.15. Provide and Install pull down tinted shades (similar to other booth locations).
 - 12.4.16. To prevent damage, guardrail shall be installed on the inbound and outbound lanes of the booth. Guardrail layout and specifications must be submitted to WCAA Security for approval prior to installation.
 - 12.4.17. Paint all lanes, hold short and directional lines.
- 12.5. Temporary Guard Booth
Since there is no existing guard booth at this construction site, the contractor shall provide the following:
- 12.5.1. Install a temporary guard booth. Booth shall be equipped with heat, electricity, and inside and outside lighting.
 - 12.5.2. Booth shall be a minimum four feet (4') wide and eight feet (8') deep. The booth shall be designed and fabricated with the door and windows the same as existing checkpoint booths (see checkpoint booth adjacent to Concourse A at L.C. Smith Terminal).
 - 12.5.3. Provide temporary phone service to the booth.
 - 12.5.4. Provide a temporary card reader to be used with the WCAA's Card Access System. The reader shall be interfaced with an "Authorized" and "Denied" indicator lights that shall illuminate upon authorization or denial from the SCAS.
 - 12.5.5. Provide two (2) duplex 110VAC outlets (Ground Fault Protected).
 - 12.5.6. All equipment shall be approved by the WCAA Security prior to installation and operation. Contact WCAA Security for detailed specifications of the above equipment.
 - 12.5.7. To prevent booth damage, guardrail or other approved barriers, shall be installed on the inbound and outbound lanes of the booth.
 - 12.5.8. Install temporary signs. The signs shall include as a minimum the following:
 - 12.5.8.1. "Stop - Wait Until Traffic is Clear" sign mounted at the inbound lane, twenty-five feet (25') prior to booth. (If conditions permit, a white Stop-Line shall be painted on the ground adjacent to the sign.)
 - 12.5.8.2. "Stop" signs adjacent to the gate arm operators on the inbound and outbound lanes. "Stop" sign may be mounted on the same post at the "Wait until traffic is clear" sign.
 - 12.5.8.3. "Wait Until Gate is Closed Before Proceeding - No Tailgating" sign on both sides of the inbound and outbound automatic gate leaves.

- 12.5.8.4. A "Restricted Area - No Public Access" sign shall be mounted on the top front of the booth facing the public side. The sign shall be the same size and design as other checkpoint booth signage.

12.6. Microwave Gate Operation

The following is a synopsis of the microwave detector operations (The contractor will be required to pass the System's Acceptance Test for the microwave, prior to completion of the project.):

- 12.6.1. The microwave is designed to detect the presence of persons or objects between the two (2) sets of detectors. Any attempt to pass between the public detectors should enunciate an alarm in the Security Control Center.
- 12.6.2. To access the microwave from the public side, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system).
- 12.6.3. Once a valid card read is received, the microwave will not alarm when penetrated, and will reset once the vehicle/person has penetrated the detector on the AOA side of the fence.
- 12.6.4. To exit the AOA, the vehicle/person penetrates the AOA detector which will prevent an alarm from reporting until the public detector is cleared. Once the object is clear of the public detector, then both detectors will reset.
- 12.6.5. Once the microwave has reset, it shall take another valid card read to access the opening from the public side.
- 12.6.6. Any attempt to access the microwave without a valid card read shall enunciate as an alarm in the Security Control Center.
- 12.6.7. Two yellow and white zipper lines shall be painted to mark the microwave beam locations on the throat of the ramp. The lines shall be painted twenty feet from the center of beams on each side.
- 12.6.8. Signage shall be installed to match the County signs that states "Warning Electronic Detection Device". Contact Airport Security for exact placement location.
- 12.6.9. Install cement ballasts to protect the card readers, microwave detectors and SCAS panels.

12.7. Manual 20' Slide Gate

The following is a synopsis of the gate operations (The contractor will be required to pass the System's Acceptance Test, prior to completion of the project.):

- 12.7.1. To access the gate from either the public or AOA side of the gate, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system).
 - 12.7.2. Once the system has validated the card, the maglocks will release allowing the gate to be opened.
 - 12.7.3. A local horn and strobe will activate if the gate is not closed in a predetermined time. (The horn and strobe will automatically reset after the gate is closed.)
 - 12.7.4. Once the door is secured, it shall take another valid card read to be reopened.
 - 12.7.5. Any attempt to open the gate without a valid card read shall activate the local horn and strobe and enunciate as an alarm in the Security Control Center.
 - 12.7.6. To prevent damage, protection posts shall be installed to protect the card readers and the gate opening.
- 12.8. Delay Hardware Operations
The following is a synopsis of the delay hardware operations (The contractor will be required to pass the System's Acceptance Test, prior to completion of the project.):
- 12.8.1. To access the door from the public side of the door, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system). An egress button on the AOA side of the door will allow access into the building.
 - 12.8.2. Once the system has validated the card or the egress button is pressed, the maglocks will release allowing the door to be opened.
 - 12.8.3. A local horn and strobe will activate if the door is not closed in a predetermined time. (The horn and strobe will automatically reset after the door is closed.) The horn and strobe is to be mounted adjacent to the door on the public side. The horn and strobe shall be mounted high enough and have adequate protection to deter tampering.
 - 12.8.4. Once the door is secured, it shall take another valid card read to reopen the door from the public side.
 - 12.8.5. Any attempt to open the door without a valid card read shall activate the local horn and strobe and enunciate as an alarm in the Security Control Center (SCC), but the door shall not unlock.
 - 12.8.6. If the crash/touch bar is held for greater than 3 seconds, an irreversible timer will engage causing the door to unlock in 15 seconds. When the door releases and the door is opened, an alarm shall enunciate in the SCC. The locking mechanism may be reset from the SCC.

- 12.8.7. If the local smoke detector is activated, the maglock will automatically release, and the local horn and strobe will activate. An alarm will be enunciated in the SCC that the Smoke alarm is active.

12.9. Pedestrian Doors (Fire Exits) - A100 type

The following is a synopsis of the Maglocked fire exit hardware operations (The contractor will be required to pass the System's Acceptance Test, prior to completion of the project.):

- 12.9.1. To access the door from the public side of the door, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system). An electronically integrated crash bar on the AOA side of the door will allow access out of the building.
- 12.9.2. Once the system has validated the card or the crash bar is pressed, the maglocks will release allowing the door to be opened.
- 12.9.3. A local horn and strobe will activate if the door is not closed in a predetermined time. (The horn and strobe will automatically reset after the door is closed.) The horn and strobe is to be mounted adjacent to the door on the AOA side. The horn and strobe shall be mounted high enough and have adequate protection to deter tampering.
- 12.9.4. Once the door is secured, it shall take another valid card read to be reopened the door from the public side.
- 12.9.5. Any attempt to open the door without a valid card read shall activate the local horn and strobe and enunciate as an alarm in the Security Control Center (SCC), but the door shall not unlock.

12.10. CCTV Requirements

Depending on the type of operation and location, CCTV coverage of the area may be required. WCAA Security will specify the type and number of cameras required. All components used must be compatible with the existing CCTV system and must be approved prior to installation. The following are the CCTV requirements:

- 12.10.1. CCTV shall be enclosed in an Environmental housing.
- 12.10.2. Exterior Environmental Housings shall be heated.
- 12.10.3. Camera Electronics shall be heated.
- 12.10.4. Wipers may be required as specified by WCAA Security.
- 12.10.5. All video and control communications shall be via fiber optics unless otherwise approved.
- 12.10.6. All CCTV components make and models shall be approved prior to installation.

- 12.10.7. All towers installed must have “anti-climb” protection and protection posts.
- 12.10.8. Lighting must be provided to illuminate the viewing area.
- 12.10.9. Camera wiring shall be in conduit.
- 12.10.10. Camera video may be required to be incorporated into the Airport’s Digital Recording System. The interface into the recording system shall be by the Airport’s System integrator.

13. Fire Department

13.1. Temporary Trailers

The conditions listed below must be met prior to the occupancy of ANY construction trailer. Failure to comply with these conditions may result in eviction.

- 13.1.1. Temporary trailers shall comply with NFPA 241, Chapter 2 & Listed References.
- 13.1.2. No trailers (of any type) shall be placed under any concourse, moving walkway, or area under construction.
- 13.1.3. All temporary trailers shall be equipped with a smoke detector in each room.
- 13.1.4. A minimum of a 2A10BC fire extinguisher is to be positioned at each exit door.
- 13.1.5. The minimum spacing for any temporary trailer shall be six (6) feet on all sides from any other trailer or fence.
- 13.1.6. The space under the temporary trailer shall not be used for the storage or placement therein of flammable gases, liquids, or gas and liquid fuel powered equipment. This area shall be kept free of build-ups of rubbish , trash, or other combustibles.
- 13.1.7. A temporary trailer shall be approved for use as office occupancy only. Use of a trailer for storage purposes of any kind is prohibited.
- 13.1.8. Any temporary trailer with a length of 30 feet or longer shall have two (2) exits, marked with approved exit signs. Trailers less than 30 feet that are used for office space shall have an approved exit sign mounted over the door.
- 13.1.9. In temporary trailers, all exit doors shall be open for egress whenever the unit is occupied. Draw bolts, hooks, and other similar locking devices shall be prohibited on all egress doors.
- 13.1.10. In temporary trailers, the installation of any heating system shall have prior approval of the WCAA Fire Marshal.

- 13.1.11. Company name shall be displayed on the east and west sides of trailer.
- 13.1.12. Emergency lights at exit doors.
- 13.1.13. Exit stairs are to be illuminated.
- 13.1.14. A final inspection is required by the WCAA Fire Prevention Division prior Occupancy (734.942.0061).

13.2. Fire Alarm, Sprinklers and Protection

- 13.2.1. Testing and installation of the Fire Alarm System in the Premises shall be by the Tenant. The Fire Alarm System shall become part of the WCAA's Edwards system and installed by an Edwards certified installer for the level of service for the Airport's system. Separate stand alone systems shall not be used.
- 13.2.2. A Knock Box shall be installed and a key provided to the Fire Department. Contact the Fire Prevention Office for ordering information and when a key(s) is available.
- 13.2.3. Provide proper fire extinguishers throughout per NFPA 10.
- 13.2.4. Plans shall show the location of life safety devices i.e. horns/strobes, pulls, etc.
- 13.2.5. Plans shall show all sprinkler head locations and piping. All piping shall be identified with **labels** or **painted red**.
- 13.2.6. The Contractor **SHALL** ensure that any architectural feature, light, duct, steel, or other object will obstruct no sprinkler discharge patterns.
- 13.2.7. The Contractor **SHALL** provide auxiliary drains where a change in direction prevents drainage of any system piping through the main drain valve.
- 13.2.8. All new strobes, or strobe circuits shall activate in accordance with the sequence of events requirements for the fire zone containing the proposed space. The new strobes, or strobe circuits shall be synchronized with the fire zone containing the space.
- 13.2.9. All fire protection systems or components, (i.e. sprinkler systems, smoke detection, heat detectors, manual pull stations, emergency exiting and emergency lighting, etc.), shall be fully operational prior to occupancy and/or use of said area and this shall be documented by a pre-occupancy inspection by Fire Marshal's Office.

13.3. Minimum Requirements for Attended and Unattended Fuel Dispenser Locations

- 13.3.1. Dispensers SHALL:
 - 13.3.1.1. Only operate when nozzle is removed from dispenser.
 - 13.3.1.2. Be protected from damage and secured in place to a concrete island.
 - 13.3.1.3. Have a maximum hose length of eighteen (18) feet.
 - 13.3.1.4. Have a listed automatic self-closing nozzle. (hold open devices prohibited)
 - 13.3.1.5. Have a splashguard for dispensing.
 - 13.3.1.6. Have a breakaway device installed in the hose.
 - 13.3.1.7. Have an emergency shut-off not less than twenty (20) feet and not more than one hundred (100) feet from the dispenser.

- 13.3.2. Signage SHALL be installed to read:
 - 13.3.2.1. No smoking.
 - 13.3.2.2. Stop Motor.
 - 13.3.2.3. No dispensing into unapproved containers.
 - 13.3.2.4. In case of FIRE or SPILL:
Use EMERGENCY STOP
Report Emergency by calling 911 from Fixed Phone System and (734) 942-3600
 - 13.3.2.5. Product Identification.
 - 13.3.2.6. EMERGENCY STOP switches SHALL be identified.

- 13.3.3. Fire Protection
 - 13.3.3.1. Provide a minimum of one (1) 4A-40BC rated portable fire extinguisher within thirty- five (35) feet of each pump dispenser location, but NO closer than ten (10) feet.
 - 13.3.3.2. A U.L. listed and approved fueling area suppression system is required.

- 13.3.4. Miscellaneous
 - 13.3.4.1. All tank vent pipes SHALL be a MINIMUM of twelve (12) feet above grade and no closer than five (5) feet to any building opening.
 - 13.3.4.2. Spill protection shall be required at fill pipes

- 13.4. Fuel Island Fire Protection Requirements
 - 13.4.1. Discharge Nozzles. Discharge nozzles shall be listed for their intended use.
 - 13.4.2. Discharge Nozzles shall be of adequate strength for use with the expected working pressures.
 - 13.4.3. Discharge Nozzles shall be of brass, stainless steel, or other corrosion-resistant materials, or be protected inside and out against corrosion.
 - 13.4.4. Discharge nozzles shall be made of noncombustible materials and shall withstand the expected fire exposure without deformation.

- 13.4.5. Discharge nozzles shall be permanently marked for identification.
- 13.4.6. Discharge nozzles shall be provided with blow-off caps or other suitable devices or materials to prevent the entrance of moisture or other environmental materials into the piping.
- 13.4.7. The protective device shall blow-off, open, or blow out upon agent discharge.
- 13.4.8. Manual actuators shall not require a force of more than 40 lb (178 N).
- 13.4.9. Manual actuators shall not require movement of more than 14 in. (356 mm) to secure operation.
- 13.4.10. All manual actuators shall be provided with operating instructions.
- 13.4.11. The operating instructions shall be permitted to include the use of pictographs and shall have lettering at least ¼ in. (6.35 mm) in height. (See 5.7.1.7.)
- 13.4.12. All remote manual-operating devices shall be identified as to the hazard they protect.
- 13.4.13. Shutoff Devices. Shutoff devices shall require manual resetting prior to fuel or power being restored.
- 13.4.14. Electrical wiring and equipment shall be installed in accordance with NFPA 70, National Electrical Code®.
- 13.4.15. All shutoff systems shall be fail-safe.
- 13.4.16. All shutoff systems shall require manual resetting prior to restoration of the operating conditions existing before operation of the extinguishing systems.
- 13.4.17. All shutoff devices shall function with the system operation.
- 13.4.18. A readily accessible means for manual activation shall be located in a path of exit or egress.
- 13.4.19. All remote manual actuators shall be identified as to the hazard they protect.
- 13.4.20. When a listed releasing mechanism is used employing a single line for mechanical detection and remote manual control, the remote manual control shall be installed inline, prior to all detection devices, so that malfunction of one does not impede operation of the other.
- 13.4.21. For single hazard systems, a similar supply shall be kept on hand if the importance of the hazard is such that it cannot be shut down until recharges can be procured.

- 13.4.22. The dry chemical container and expellant gas assemblies utilizing nitrogen shall be located where the ambient temperature is normally -40°F to 120°F (-40°C to 48.9°C).

13.5. Requirements for Labeling and Placarding Above Ground Storage Tanks

- 13.5.1. Labeling and placarding SHALL be provided on all appropriate sides either by pedestrian or vehicle traffic.
- 13.5.2. Labeling and placarding, SHALL be clearly legible and of contrasting colors. In accordance with NFPA 704, 1996. Lettering SHALL be a MINIMUM of three (3) inches in height in order to be readable at one hundred (100) feet.
- 13.5.3. The label SHALL identify the product within the above ground storage tank, for example:
- GLYCOL & WATER BLEND**
- Red lettering on a white background
 - Three (3) inches in height
 - Width of lettering in proportion to height
- 13.5.4. All above ground storage tanks shall be posted with no smoking signs.
- 13.5.5. All signage SHALL be weather resistant, and of the permanent type.
- 13.5.6. All above ground storage tanks SHALL be placarded in accordance with requirements of NFPA 704, 1996 – Identification of Materials by Hazard Rating System.
- 13.5.7. Labeling and placarding may be either painted or of the self-adhesive vinyl type in accordance with N.F.P.A. 704, 1998.

13.6. Above Ground Hydrant Standards

- 13.6.1. The above ground hydrant will conform to the following:
- 13.6.1.1. All new above ground hydrants shall be East Jordan Model 6BR (traffic).
- 13.6.1.2. Each new hydrant shall be equipped with two (2) pumper nozzles.
- 13.6.1.3. Operating nut shall be a 1-1/16" pentagon nut.
- 13.6.1.4. Inlet connection shall be a 6" mechanical joint hub.
- 13.6.1.5. Operating nut shall open left (Counter clockwise).
- 13.6.1.6. Depths of bury 6.5' from bottom of inlet to finish grade.
- 13.6.1.7. Nozzle threading:

One outlet shall be:

Detroit Pumper Standard 4.566" at 6 threads per inch O.D. (3 ¾" I.D.)

One outlet shall be:

4" NPT, which will be retrofitted with a 5" Storz Outlet and a Hydra Snap Cap after hydrant installation. (This will be the contractor's responsibility)

13.6.1.8. Hydrants shall be non Self-Draining type.

13.6.2. Barrier protection shall be provided around all hydrant locations, as well as a minimum of 36 ins. of clear working area is provided 360 degrees around the hydrant. NFPA 24 7.3.5.

13.6.3. All underground components of any water supply system (water mains, valves, thrust blocks, T's, etc.) shall comply with the City of Romulus standard.

13.6.4. Guardrail shall not block fire hydrants.

13.6.5. All fire hydrant installations and relocations will have prior approval. Contact Fire Marshal's Office at (734) 942-0061.

13.7. Wall Hydrants

13.7.1. Any new wall hydrant installation shall consist of one (1) 5" Storz Outlet with Hydra Snap Cap. Operating valve shall be wheel type (PIV). All wall hydrants shall have drain, (between valve and outlet), and shall be properly identified, etc., and shall be installed with a 45° Elbow.

13.8. Fire Department Connections

13.8.1. All FDC's shall consist of one (1) 5" Stortz Connection with a Hydrant Snap Cap, appropriate signage, and comply with all requirements of NFPA 13.

14. Environmental Requirements

14.1. General

14.1.1. Permit applicant shall comply with any and all applicable laws and regulations governing its environmental work under its contract. Permit applicant shall, at its own expense, obtain all lawfully required governmental licenses and permits, and pay all assessed service charges as necessary. Permit applicant agrees to save and hold harmless the County of Wayne and the WCAA from any environmental loss, liability, cost, expense, suit or claim for damages arising out of its performance.

14.1.2. Permit applicant or their contractor shall provide the WCAA Inspector's office a detailed list of any hazardous materials removed from this site including type of material and final disposal point.

- 14.1.3. Copies of all Phase I and Phase II environmental studies must be provided to the WCAA immediately after completion.
 - 14.1.4. All work is to be in accordance with the Michigan Department of Environmental Quality (MDEQ).
 - 14.1.5. All construction methods and materials must meet or exceed all applicable MDEQ and all local code and construction specification requirements.
- 14.2. Projects Involving Excavation:
- 14.2.1. The Tenant must advise the WCAA Environmental division staff (247-3686, 942-3796 or 942-3748) immediately if any visible or volatile soil or groundwater contamination is encountered during excavation.
 - 14.2.2. If any excavation on the site is to be dewatered during the course of this project, the effluent must not be discharged to an Airport storm sewer leading to any Airport pump station or storm water retention pond.
 - 14.2.3. Contaminated soil and water that are encountered or generated during this project shall be removed from airport property in accordance with all applicable Michigan Department of Environmental Quality rules and regulations.
 - 14.2.4. All stockpiled contaminated soil removed from any excavation shall be placed on and covered with impermeable material (e.g. polyurethane sheeting), and contained in place, prior to proper disposal off Airport property.
- 14.3. Tanks:
- 14.3.1. All underground storage tanks installed for the intended use of storing chemicals, petroleum products, waste petroleum, or other contaminating materials must comply with all applicable Airport Rules and Regulations, Airport Policies, and the requirements of the Michigan Department of Environmental Quality – Storage Tank Division.
 - 14.3.2. All underground storage tanks are to be removed, or closed in place, in accordance with all applicable Airport Rules and Regulations, as well as the Michigan Department of Environmental Quality underground storage tank closure requirements.
 - 14.3.3. The tenant must submit a copy of the final “Closure Report”, required by the Michigan Department of Environmental Quality – Storage Tank Division, to the Page 2. Airport Environmental Office, for all UST’s that are removed, or closed in place.
 - 14.3.4. **(This requirement pertains to underground storage tanks being brought back in service after a period of abandonment, tanks changing service,**

etc.). All tanks must be hydrostatically tested and the results submitted to the Airport Environmental Manager, for review and approval, prior to use.

- 14.3.5. All UST's that are removed, closed in place, or undergo a change in service, must be properly registered with the State of Michigan, and a copy of the new (or changed) registration must be submitted to the WCAA Environmental division.
- 14.3.6. All permanent, aboveground tanks, to be installed for the purposes of fuel storage, must comply with all applicable Airport Rules and Regulations, Airport Policies, and Federal and State laws and regulations. This includes pre-approval, from the Michigan Department of Environmental Quality, Storage Tank Division, of the planned installation **before** work begins on the project. The tenant must contact the Lansing office of the Storage Tank Division, (517-373-8168), and request a copy of the "Plan Review" forms for aviation fuel storage.
- 14.3.7. Verification of the State's approval of the planned tank installation must be submitted to the WCAA Environmental division.
- 14.3.8. All permanent, aboveground storage tanks to be installed for the intended use of storing chemicals, waste petroleum, or other contaminating materials must comply with all applicable Airport Rules and Regulations, Airport Policies, and the requirements of the Michigan Department of Environmental Quality.

14.4. Containerized Hazardous And Non-hazardous Material Storage:

- 14.4.1. Hazardous material storage structures (e.g. sheds, etc.), whether temporary or permanent, must be certified to contain hazardous materials, (wastes and/or products).
- 14.4.2. The volume of spill containment, provided by the storage building, must not be less than the volume of hazardous material stored in the building.
- 14.4.3. The storage building is to be placed the greatest distance possible from all storm and sanitary sewer openings.
- 14.4.4. The storage of drummed (or other vessels) of hazardous wastes, hazardous products, universal wastes, and/or liquid industrial waste, on Department of Airports property, must be in compliance with all applicable Federal and State laws and regulations.
- 14.4.5. The storage of all drummed (or other vessels) of all other wastes, not listed in #17. above, on Department of Airports property, is strictly temporary and must be properly disposed of off Airport, by the tenant, within any applicable time frames authorized by the applicable Federal and State laws and regulations.

15. Wildlife Control

- 15.1. All waste storage and/or handling facilities, (e.g. trash dumpsters, etc.), on the tenant's site, must be designed, constructed, and operated in such a manner that will not attract wildlife, (e.g. birds, rodents, other mammals), to Airport property.
- 15.2. No landscaping will be permitted, of any of the following plant types, (trees, bushes, shrubs), at or near buildings and/or other structures, within the Airport Operating Area (AOA), or other areas on Airport property considered vulnerable to wildlife hazards (see Attachment A of this document).

16. Waste Handling

Garbage storage and/or compaction and/or refrigeration equipment must be installed in the Premises by the Tenant if perishable items are handled or if required by applicable governing laws, codes, and/or regulations.

17. Seismic Restraint

The Tenant shall be responsible for the building design to conform to the seismic restraint requirements in the latest applicable building codes and shall suitably restrain all architectural, electrical and mechanical components in accordance with such regulations

Barrier Free Design Requirements

1. General

- 1.1 As a part of this manual, guidelines for barrier free design have been included. It will be every Tenant's responsibility to ensure that its store designs conform to current code requirements for barrier free access as laid out in the Michigan Building Code and the American Disabilities Act. This section in no way is meant to replace applicable barrier free codes and/or legislation and if there is a conflict, the more stringent requirement should be followed.
- 1.2 The WCAA has made a commitment to persons with disabilities. The design and construction of the Tenant's installation and fit-out, including communications services, choice of finishes, furniture selection, as well as the overall management approach will be reviewed specifically to ensure that people with disabilities will have full use of facilities. More than just a social commitment, the WCAA has recognized that as our society ages and as people with disabilities become more and more integrated into the activities of normal daily living, facilities will need to support people of all abilities as a practical reality. Accessible design will also allow the Tenants to benefit from an increase in the number of special needs travelers. By example, more than 80% of the vacation traveling public are older adults that will benefit from a barrier free approach and one of six people in North America has a disability. The WCAA recognizes that persons with disabilities represent a rapidly growing and largely untapped market force in our economy, and that they will play a large part in the activities at the Airport.
- 1.3 The WCAA intends to promote the accessibility aspects of its facilities, and encourage persons with disabilities to use its services; maintaining good access for persons with disabilities within each Premises is required.
- 1.4 See Exhibit "E" FAA Accessibility Key Provisions Attachment.

Construction Regulations

1. Pre-Construction Requirements

Following the design approval process there are several mandatory requirements prior to commencement of construction. These requirements are listed below.

1.1. Pre-Construction Meeting

A pre-construction meeting must be scheduled through the WCAA. Those present at this meeting should be the Tenant, the Tenant's contractor and job site superintendent and relevant WCAA staff. The purpose of the meeting is to clarify site rules for contractors, procedures, scopes of work, identify contact persons, hours of operation, staging areas, routes of access, safety procedures, and other issues pertinent to the coordinated construction effort of the improvement. The 24 hour phone or pager numbers of the Tenant's representatives shall be provided to the WCAA representative. A joint tour of the premises will form part of this meeting. The following submissions shall be made at the pre-construction meeting;

- 1.1.1. Copy of Wayne County Airport Authority Construction or Alteration (C/A) application.
- 1.1.2. One copy of the applicable City of Romulus building permit.
- 1.1.3. One copy of the approved City of Romulus stamped building permit drawings.
- 1.1.4. A construction schedule and plan that includes all activities required to complete the work. The Contractor shall make an oral presentation of the Construction Plan. The schedule shall include all work components, shop drawings, submittal process, owner furnished items, interfaces with pertinent agencies and/or base building, milestones, substantial completion and final acceptance dates. If WCAA identifies any problems with regards to the schedule or construction plan, they will notify the Tenant. Failure to notify the Tenant of a potential scheduling or operations problem does not relieve the Tenant and their contractor of their responsibility. It is the Tenant's responsibility to notify WCAA of any change in this schedule.
- 1.1.5. Updated contact list including consultant, contractors, subcontractors and others. Contact lists are to include firm name, contact person, address and telephone, facsimile, pager, mobile and emergency phone numbers.

1.2. Identification Badging

All construction personnel must either be badged or be accompanied by someone with a badge at all times. No one is allowed on the airfield at any time unless wearing the proper badge or accompanied by a badged person at all times. Questions regarding badging requirements for construction personnel can be directed to Airport Security, 942-3606. The process for badging is as follows;

- 1.2.1. The Tenant's Contractor(s) and sub-contractors shall comply with all rules and regulations concerning security.

2. Construction Rules and Regulations

2.1. General

- 2.1.1. All work at the Airport shall be performed by skilled workers using new material, to the highest standards of construction practice. All workmanship by the Tenant shall be to the satisfaction of WCAA.
- 2.1.2. Workers on site shall use only those toilet facilities provided by the Tenant and designated for construction personnel.
- 2.1.3. Materials shall not be stored outside the limits of the Tenant's premises on the Airport.
- 2.1.4. If the Tenant and/or its consultants or contractor require access to a space not currently being utilized or operated by the same Tenant, prior approval must be obtained for access to that space. The Tenant must request, from WCAA, access to the space a minimum of 48 hours prior to the desired time of access.
- 2.1.5. Project rules and regulations are established to promote safe and timely completed projects with minimal disruption to other site activities and airport operations. WCAA reserves the rights, at its sole discretion, to modify, delete, add or alter these procedures and requirements as needed from time to time.
- 2.1.6. The contractor shall request, and have completed, underground utility sweeps from airport maintenance, airport security, the FAA and Miss Dig prior to the commencement of any excavating.
- 2.1.7. Provide 3-days advanced notice to WCAA Electrical Department to mark airport electrical prior to the commencement of work. Notification is the responsibility of the contractor.
- 2.1.8. All cutting or welding shall require a site inspection and permit from WCAA Authority Fire Marshal prior to work taking place.
- 2.1.9. WCAA Operations, Security and the WCAA Inspector must approve all delivery routes.
- 2.1.10. Material storage on site must be coordinated with the WCAA Inspector.
- 2.1.11. Copies of approved mix designs, testing results, rough/final building and mechanical inspections, Certificate of Occupancy from the City of Romulus building authority and "as built" drawings, must be submitted to WCAA Inspectors office prior to final inspection and use/occupancy of the building.

- 2.1.12. The WCAA Inspector shall be granted access to job site for the purpose of inspecting for compliance to the conditions outlined in this permit. Inspections include, but are not limited to, permit compliance, sewer connections, water taps, gas taps, footing excavations, site preparation and construction methods.
- 2.1.13. It is the responsibility of the Contractor to have a site supervisor present at all times when any work is being performed.
- 2.1.14. Any damage to existing facilities, finishes, and utilities is the responsibility of the permit holder. Repair and/or replacement must be completed within the timeframe and requirements of the WCAA.
- 2.1.15. Utility shut downs and interfacing are to be coordinated with WCAA Inspector and WCAA Operations Construction Dept. at least 48 hours in advance. This also includes fire suppression shut downs, coordinated with the WCAA Fire Marshal's office.
- 2.1.16. All water ties/connections requiring a shutoff shall be coordinated with the WCAA Inspector. The Contractor, to all effected parties 72 hrs prior to shutoff, shall provide written notice of shutoff. Shutoffs normally take place between 11:00pm to 5:00am.
- 2.1.17. All work requiring any power interruptions must be coordinated through WCAA Operations, Electricians and Inspectors offices. The Contractors must provide written notice to all appropriate WCAA departments and all affected parties 72 hours prior to any power interruption. All temporary power will be supplied by contractor and must be coordinated through WCAA staff. Power interruptions will normally take place between the hours of 11:00 p.m. and 5:00 a.m.
- 2.1.18. If barricades are anticipated they must be submitted and approved by the WCAA.
- 2.1.19. Permit applicant or their contractor shall provide the WCAA Inspector's office a detailed list of any hazardous materials removed from this site including type of material and final disposal point.
- 2.1.20. All parties will conform to FAA and these Guidelines for security.
- 2.1.21. Contractors, sub-contractors and delivery persons must follow TSA Guidelines.
- 2.1.22. Keep taxi lane clean of FOD. Broom sweeping of taxi lane will be required.
- 2.1.23. All roadways, sidewalks, and parking areas around site shall be kept clean and free of debris. All required cleaning will be at the Contractor's expense.

- 2.1.24. A contractor may not use fire hydrants without prior written approval from the WCAA Fire Marshal.
- 2.1.25. Fire safety during construction, alteration and demolition will be ensured through strict compliance with International Fire Prevention Code, chapter 14. This section will also ensure site access.
- 2.1.26. For all construction materials, contractors shall submit at the request of the WCAA Fire Marshal, prior to installation, substantiation of the Fire Resistance Rating and Flame Spread/Smoke Development data.

2.2. Hours of Construction

- 2.2.1. Normal working hours are from 7:00 a.m. to 3:30 p.m., Monday through Friday.
- 2.2.2. Construction activities must take place between 10:00 p.m. and 5:00 a.m. unless otherwise allowed. Depending on the specific circumstances, some activities may take place during regular working hours at WCAA sole discretion.

2.3. Security Regulations

The Tenant is responsible to provide a copy of these security requirements to the project's prime Contractor (the "Prime") and to instruct the Prime to disseminate the requirements to the appropriate sub-contractors.

As a minimum, the following conditions apply for permit approval. Additional requirements may be incorporated due to local, state or Federal Regulations or increased security conditions at the Airport:

2.3.1. AOA ACCESS REQUIREMENTS

- 2.3.1.1. All individuals working inside or traversing the AOA or Restricted Area shall have ID Badges obtained from the Airport's Credentials Office (734) 942-3606.
- 2.3.1.2. Unescorted access requires a photo ID Badge. Contractors may contact the Airport's Credentials Office for specific ID Badge processing procedures.
- 2.3.1.3. All construction/installation vehicles, while on the AOA, shall have a DTW card displayed on the dashboard. In addition, any persons that require driving on the AOA will be required to undergo a ramp driving training class with WCAA Operations. Scheduling for the training and the DTW cards may be obtained from the WCAA Operations Construction Office (734-942-3823).
- 2.3.1.4. All construction/installation vehicles shall display company logo affixed to the drivers' and passengers' door. Logos shall be no

less than 12" x 12" and can be magnetic, printed or pasted on, but must be commercially made.

2.3.1.5. Entry and exit to AOA job sites shall be through manned vehicle checkpoints unless otherwise approved by WCAA Security.

2.3.1.6. Access through security doors and gates can be coordinated by contacting WCAA Security. A letter from the permit holder authorizing specific door access within their leased space is required. Access to other tenant or airline locations requires the permission of the specific leaseholder.

2.3.2. General Requirements and Contractor Rules

2.3.2.1. Per Federal Regulation 49 CFR 1520, all documents shall be identified as 'Security Sensitive Information'. All drawings shall be marked with the following statement '**WARNING: This record contains Sensitive Security Information that is controlled in 49 CFR part 1520. No part of this record may be disclosed to persons without a "need to know", as directed in 49 CFR part 1520, except with the written permission of the Administrator or the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For US government agencies, public disclosure is governed by 5 U.S.C. 552 and 49 CFR part 1520.**'

2.3.2.2. The contractor or his employees shall not prop open any gates or doors that allow public access to the AOA or any restricted area. This may include temporary walls to keep the public from any construction area. Temporary walls shall meet AOA access requirements (Fence standards or SCAS system).

2.3.2.3. To prevent possible explosive or incendiary devices from being hidden in areas close to Airport facilities, equipment, aircraft, or vehicles, no containers (tool boxes, storage containers, material trailers) shall be left unsecured or unattended in public areas.

2.3.2.4. The contractor shall not bring any tool through passenger screening. No tools shall be left unsecured or unattended in the public areas.

2.3.2.5. The contractor shall prevent unauthorized pedestrian or vehicular access to the AOA or restricted area from the construction site.

- 2.3.2.6. Contractor access is restricted to the permit construction site only and is not permitted to access any other AOA or restricted area. All ID Badges are to be returned when the contractor is completed with the project. The ID Badges are valid for approved construction projects only and is not covered under warranty work.
- 2.3.2.7. The contractor is not to paint over or tamper with any component of the Security Card Access System unless authorized by the Security Operations Manager.
- 2.3.2.8. Due to the potential for damage, contractors must receive approval from WCAA Security prior to lifting any equipment or material over the Airport's AOA Fence.
- 2.3.2.9. Contractors shall not excavate under or around the AOA fence without prior approval from WCAA Security.
 - 2.3.2.9.1. Depending on the duration and extent of the excavation, the contractor may be required to have an Airport security guard at the site during this work. The contractor shall be responsible for all costs associated with the guard coverage.
 - 2.3.2.9.2. To prevent AOA access, all excavations that traverse the AOA line shall be adequately enclosed or covered prior to the end of each workday. Prior to completion of work for the day, the contractor shall contact WCAA Security to have the site inspected.
- 2.3.2.10. The contractor shall not park any vehicles, nor store any construction materials, within six feet of the AOA perimeter fence.
- 2.3.2.11. If a temporary opening is made that would allow access into a secure area, the contractor shall erect a partition to prevent access from the public area until the area is inspected and approved by the WCAA Security. The contractor shall not install any openings/doors that would allow access to the AOA unless approved and tested by the WCAA.
- 2.3.2.12. All new security doors or gates shall have the appropriate signs and be numbered using the WCAA numbering system. In addition, all jetway stair doors are required to have 'restricted area' signage.
- 2.3.2.13. Any new building or structure that will be open to the traveling public shall host the Airport's public addressing system; contact Central Communication Manager, Jim Osborn (734) 942-5300, for additional information.

- 2.3.2.14. Concrete bollards shall be secured in front of any terminal building at all times. Movement of the bollards shall be coordinated with WCAA Security.
 - 2.3.2.15. Contractors are to maintain a daily issuance log for all non-photo ID Badges. Lost or stolen ID's are to be immediately reported to the WCAA Security (734-942-3606).
 - 2.3.2.16. Dumpsters within the public area of terminal buildings are not allowed.
 - 2.3.2.17. Prior to any area being opened to the public a security sweep of the area is required - contact Debra Sieg (734) 942.3746.
- 2.3.3. All other requirements in the Airport Security Program, Security Rules for Contractors, Badging Procedures, and all local, state, and Federal laws and regulations also apply to this permit.

2.4. AOA Access Requirements

- 2.4.1. Construction activity shall be in accordance with the current FAA Advisory Circular 150/5370 operational safety on airports during construction.
- 2.4.2. All contractor employees who will be operating vehicles and/or construction equipment on the AOA will be required to attend a one hour training class concerning the safe operation of vehicles on Airports. Ramp driver training will be conducted by WCAA Operations Training Unit. A ramp driving Decal will be placed on the badge of those drivers for AOA access. All other drivers must be escorted.
- 2.4.3. All Contractor vehicles and equipment must display a DTW permit issued by the Airfield Construction Office. Contact 734-942-3823 for information to obtain permits and to attend training classes.
- 2.4.4. During daylight hours, mark vehicles with orange and white checkered flags or flashing yellow beacons. For night-time or low-visibility operations, mark vehicles with flashing yellow beacons.
- 2.4.5. Contractor must keep haul route free of debris.
- 2.4.6. Construction fencing that is on the AOA (ramp, taxi-lane, taxiway and runway) areas must have **flashing red lights** attached 5 feet above ground level and spaced every 20 feet, starting at each corner post. Attach 24"x 24" red reflecting sign (end of road marker) between lights. Construction fencing that crosses or is abeam a closed taxiway must have a 4' x 8' end-of-taxiway sign (retro-reflective) attached.

- 2.4.7. Closed ramp, taxi-lane, taxiway and runway areas must be marked with cones, red flashers and barricades spaced a minimum of 20' intervals or less as directed by Airfield Operations.
 - 2.4.8. Construction areas outlined with Jersey barriers shall be marked with 18" vertical stripes (construction orange) at 18" intervals facing the AOA and with a steady burning red light attached on top at 20 feet intervals. Supplement these barricades with alternating orange and white flags at least 20 by 20 inches (50 x 50 cm square that are made and installed so they are always in an extended position, properly oriented and securely fastened to eliminate jet engine ingestion.
 - 2.4.9. WCAA Operations Dispatch must be contacted daily prior to raising or lowering cranes at 734-942-3685. An approved FAA Form 7460-1 (Notice of Proposed Construction & Alteration) obtained by the C/A Permit applicant for cranes or equipment to be used must be on file in the Airfield Construction Office at time request is made. If no crane permit is in place, closure for runway or taxiway affected during period of crane use must be worked out 72 hours prior to closure.
 - 2.4.10. Flagging across active taxiways shall be provided by Airfield Operations at the expense of the contractor. A 72 hour notification prior to activity is needed.
 - 2.4.11. Flagging across non-movement areas of the AOA can be done by the contractor after completing a one-hour training class provided by Airfield Operations Training Unit.
- 2.5. Project Health and Safety
- 2.5.1. The Tenant and their contractors have sole and complete responsibility for safety on the project. The Tenant shall designate a safety representative during the entire construction period who shall regularly meet with WCAA to ensure the safety of the work. The Tenant and contractors shall comply with all health and safety requirements or standards in effect under the Federal, OSHA, State of Michigan, Wayne County, and as set forth in the latest WCAA standards.
 - 2.5.2. The Tenant and their Contractors shall comply with all fire regulations in effect under Federal, OSHA, EPA, State of Michigan, City of Romulus, and WCAA standards.
 - 2.5.3. The Tenant and contractors shall, at all times, conduct the work in such a manner as to insure the least obstruction to the public, including vehicular and pedestrian traffic. If WCAA determines that any type of operation constitutes a nuisance, the contractor shall immediately proceed to conduct its operations in an approved manner. Contingent on WCAA approval, if a contractor causes any part of a street to be obstructed or closed to traffic, the contractor shall provide, erect, and maintain at their own cost and expense all of the approved barricades, signs, lights, and reflectors necessary to provide

safe and convenient public travel. The Contractor shall also provide, at its expense, any flagmen that may be required for warning and directing traffic. WCAA may at any time require additional provisions if such are deemed necessary for public safety or convenience. The Contractor will be held responsible for all damage or injury, even though barricades, signs, lights, reflectors and flagmen are furnished as herein specified.

2.6. Monitoring of Construction Projects

WCAA's staff or their designated representatives will monitor the construction project on a regular basis. They shall have the right to inspect the Contractor's work during normal working hours or at any other time deemed necessary. The Tenant and their Contractors will be required to attend a weekly progress meeting with WCAA. The Contractor shall be responsible to prepare the agenda, conduct the meeting and publish minutes. Included in the progress meeting will be a review of the schedule, submittals, RFI's, pending change requests, coordination with WCAA, and any other issues which must be resolved, including issues which may have an impact on maintenance and/or operations.

2.7. Construction Site Maintenance

2.7.1. All construction sites must be kept in a broom clean and organized manner at all times. Debris must be kept within the construction site, removed on a timely basis and legally disposed of as set forth by Federal, Environmental Protection Agency, County and State standards and/or ordinances. Any additional clean-up costs incurred by the building O & M contractor that were caused by the Tenant's contractor shall be back-charged to the Tenant's contractor by the Tenant and reimbursed to the O & M Contractor. Under no circumstances will any dumping be allowed on Airport property.

2.7.2. Other contractor's or WCAA's dumpsters may not be used for trash/debris disposal. At its sole discretion, WCAA may allow dumpsters to be placed near the construction site on the Project site in assigned areas.

2.7.3. Access for emergency vehicles shall be kept at all times.

2.8. Project Coordination

It is the express obligation and duty of the Tenant to coordinate its contractors through cooperating and communicating with WCAA, other tenants, or other contractors. The Tenant and their Contractors shall not impede, hinder, or delay any of the aforementioned parties in the performance of their work and shall remain solely and exclusively responsible for any damages or costs incurred as a result of any hindrance or delay.

2.9. Parking for Construction Workers

Parking will be assigned at Pre-Construction Meeting.

2.10. Storage of Materials

No hazardous materials may be stored on site.

2.11. Temporary Trailers

The conditions listed below must be met prior to the occupancy of ANY construction trailer. Failure to comply with these conditions may result in eviction.

- 2.11.1. Temporary trailers shall comply with NFPA 241, Chapter 2 & Listed References.
- 2.11.2. No trailers (of any type) shall be placed under any concourse, moving walkway, or area under construction.
- 2.11.3. All temporary trailers shall be equipped with a smoke detector in each room.
- 2.11.4. A minimum of a 2A10BC fire extinguisher is to be positioned at each exit door.
- 2.11.5. The minimum spacing for any temporary trailer shall be six (6) feet on all sides from any other trailer or fence.
- 2.11.6. The space under the temporary trailer shall not be used for the storage or placement therein of flammable gases, liquids, or gas and liquid fuel powered equipment. This area shall be kept free of build-ups of rubbish, trash, or other combustibles.
- 2.11.7. A temporary trailer shall be approved for use as office occupancy only. Use of a trailer for storage purposes of any kind is prohibited.
- 2.11.8. Any temporary trailer with a length of 30 feet or longer shall have two (2) exits, marked with approved exit signs. Trailers less than 30 feet that are used for office space shall have an approved exit sign mounted over the door.
- 2.11.9. In temporary trailers, all exit doors shall be open for egress whenever the unit is occupied. Draw bolts, hooks, and other similar locking devices shall be prohibited on all egress doors.
- 2.11.10. In temporary trailers, the installation of any heating system shall have prior approval of the WCAA Fire Marshal.
- 2.11.11. Company name shall be displayed on the east and west sides of trailer.
- 2.11.12. Emergency lights at exit doors.
- 2.11.13. Exit stairs are to be illuminated.

- 2.11.14. A final inspection is required by the WCAA Fire Prevention Division prior to Occupancy (734.942.0061).
- 2.12. Temporary Site Signage
- 2.12.1. The tenant is responsible for maintaining the banner and ensuring that it is properly attached to the fence at all times.
- 2.12.2. Temporary sign must be removed when the permanent signage at facility is visible.
- 2.12.3. The WCAA reserves the right to remove the temporary sign if it is found to negatively impact airport operations and/or traffic.
- 2.12.4. The tenant must modify the directional language on the banner if it is found to be confusing to the users of the airport or Tenant's customers.
- 2.13. Protection of Existing Conditions
- 2.13.1. It is the responsibility of the Tenant and their contractors to take all precautions to provide proper protection of all existing conditions and shall submit a plan proposing methods of protecting the existing conditions. The Tenant and their Contractors shall pay for any and all damages incurred as a result of their work. If the Tenant and/or its contractors' operations cause any damage, interference, or inconvenience to work being carried out under any other contract, the Tenant and/or its contractors shall restore, replace, rectify, or otherwise make good any damage to the satisfaction of WCAA and/or their designated representatives. If the Tenant or its Contractors fail to comply with this provision, the work will be done by others at the expense of the Tenant. If, due to the nature of a repair, WCAA determines a specific entity must complete the work in order to match the existing, WCAA shall so designate this requirement and the method to complete the work. The Tenant shall be responsible for all such costs.
- 2.13.2. Any underground utilities and/or FAA lines damaged by the Contractor in the scope of work under this permit shall be repaired immediately at the Contractor's expense.
- 2.14. Compliance with all Laws
- The Tenant shall at all times observe and comply, and shall cause its consultants, contractors and subcontractors to observe and comply with all applicable federal, state, and local laws, ordinances, rules, regulations, executive and administrative orders, now existing or hereinafter in effect, which may in any manner affect the performance of the contract or the fulfillment of the Agreement terms.

2.15. Compliance with Environmental Laws

The Tenant shall at all times observe and comply, and shall cause its consultants, contractors and subcontractors to observe and comply with all laws relating to environmental matters, including contractor fueling storage/disposal systems.

2.16. Compliance with State/County Health Department

The Tenant shall at all times observe and comply, and shall cause its consultants, contractors and subcontractors to observe and comply with all Wayne County Health Department requirements relating to food service facilities.

2.17. Hot Work

Hot work is defined as a process or procedure that could result in a fire if not properly controlled. Common types of hot work in construction are welding, burning, cutting, brazing, soldering, gasoline or fuel storage areas repair, etc.

2.17.1. No welding, flame cutting, or other operations involving the use of flame, arcs, or sparking devices will be allowed without adequate protection, subject to prior approval by the Fire Marshal.

2.17.2. No Hot Work may be done without a WCAA Hot Work Permit from the WCAA Fire Department. All combustible or flammable material shall be removed from immediate working area prior to welding. If removal is impossible, all flammable or combustible materials shall be protected with a fire blanket or suitable non-combustible shield to prevent sparks, flames or hot metal from reaching flammable or combustible materials. The Contractor shall provide necessary personnel and equipment to control incipient fires resulting from welding, flame cutting, or other sources involving use of flame, arcs, or sparking devices. The Tenant's contractor shall provide and post a firewatch at any time during which welding or metal cutting is to take place. The Tenant' contractor shall abide by OSHA, API, FAA and local regulations pertaining to fire watch personnel. All welders must be certified within the last eighteen months. The Contractor is responsible to obtain any special permits required. The Tenant and its contractors shall comply with all health and safety requirements or standards in effect under the Federal, OSHA, State of Michigan, Wayne County, WCAA Standards, and WCAA Hot Work Permit.

2.18. Site/Exterior Building Painting Requirements

2.18.1. Where applicable, paint color to match existing paint color.

2.18.2. The tenant is aware that the WCAA recommends painting by a non-spray painting method (i.e. brush, roller, etc.) and has advised the tenant that spray painting within the boundaries of the WCAA has additional risks and liabilities that must be assumed by the tenant. The tenant must provide written acceptance of its liability and responsibility or any and all damages associated with the spray painting of the facility (including but not limited to damages to the Airport, its users, its visitors, environmental, wildlife, persons,

property and equipment). The tenant further understands that the tenant may be responsible for the repair and repainting of any aircraft, cars, truck, buses, etc. that may be damaged as a result of tenant's spray painting. The Tenant shall provide to the WCAA for its review and approval the process that will be followed by the tenant to resolve all claims related to the repainting of the facility. Information such as point of contact address and phone number forms to be completed by the damaged party, and a maximum timetable for settlement of claims.

- 2.18.3. Contractor must ensure that any loose debris including paint chips and contaminated wash water does not enter the Airport storm water system. Provide information to the WCAA as to the method to be used and what type of filter media will be placed over the storm drain inlets in order to prevent entry of unwanted material.
- 2.18.4. Mild soap is acceptable in small quantities; however, Material Safety Data Sheets of any chemical to be used for this project must be submitted to the WCAA for review. Only chemicals approved by the WCAA will be allowed for use.
- 2.18.5. Contractor to submit information to the WCAA explaining how overspray will be kept to a minimum.
- 2.18.6. Water-based paint to be used at all times. When applicable, provide documentation to the WCAA indicating why water-based paint is not an option for the proposed project.
- 2.18.7. A one-day supply of paint is allowed on site while work is in progress.
- 2.18.8. Extreme care shall be taken to avoid soiling adjacent buildings or equipment.
- 2.18.9. The contractor is to have sufficient inert absorbent material on hand, (such as vermiculite, etc. Not sand), during the entire washing and painting operation. This material is to be used in the event of a spill or leak of either the concentrated detergent or paint.
- 2.18.10. If a spill or leak occurs, the absorbents are to be used to preclude the liquid from entering the storm sewer system and to clean up all spillage.
- 2.18.11. No partially filled or empty containers of either material are to be left on the Premises when the project is completed.
- 2.18.12. No "leftover" detergent or paint is to be "disposed" of in either the storm or sanitary sewer systems.
- 2.18.13. The tenant and a representative from the WCAA will make 3 daily inspections of adjacent areas to check for damage due to drifting spray. These inspections shall be documented and delivered to the Division of Planning, Facilities Management and Construction daily.

- 2.18.14. The tenant must specifically agree to take adequate precautions to assure that no paint, resulting from their activities under the permit, gets on any vehicle, building or structure not intended to be painted. Any such claim or complaint shall immediately trigger the Tenant's obligations as prescribed.
 - 2.18.15. The Tenant must specifically agree to take adequate precautions to assure that no solvent or substance used for cleaning gets on any vehicle, building, or structure. Any such claim or complaint shall immediately trigger the tenant's obligations as prescribed.
 - 2.18.16. Permittee specifically agree to submit a daily report to the WCAA Inspector, which details the areas where painting was conducted, and the times of day that such painting and related activities were conducted. These reports are to be submitted until all work under this permit is complete.
- 2.19. Plan Modifications
- 2.19.1. Once the WCAA issues a C/A Permit, any proposed change must be submitted in writing to the WCAA for approval prior to proceeding with the change. This documentation must explain the reason for the requested change and be supported by adequate and appropriate information or drawings, as required. The Tenant should allow 10 calendar days for a response from the WCAA.
 - 2.19.2. Direction by the City of Romulus Building Department to make a change in the drawings does not constitute approval by WCAA. It is the Tenant's responsibility to notify and obtain WCAA approval or concurrence with any such directives or changes. If changes are made without WCAA approval, the Tenant may be required at its own expense to modify the work to conform to the approved drawings. If these modifications are not completed, they will be subject to correction through the punch list process.
- 2.20. Project Close-out Requirements
- 2.20.1. When the Tenant determines that the project is substantially complete and ready for an inspection, the Tenant shall notify WCAA in writing a minimum of 48 hours prior to the requested inspection. Such request shall be accompanied by the mandatory submissions outlined in this manual. WCAA will schedule the inspection, review the improvements and prepare a punch list of deficiencies.
 - 2.20.2. If WCAA determines that the project is substantially complete and may open, a written approval is given to the Tenant. Punch list items that are prerequisites to opening the store shall be completed and reviewed again with WCAA prior to opening. Failure to complete these items prior to opening will cause the premises to be closed until the remedial work is completed to the satisfaction of WCAA in its sole discretion.
 - 2.20.3. Following the inspection, the punch list will be issued by WCAA to the Tenant. When the prerequisites to opening noted in 2.20.2 have been

rectified WCAA will issue written authorization for the Tenant to open the premises for business.

- 2.20.4. When the Tenant has completed all punch list items, the Tenant shall request a re-inspection of the space. WCAA shall schedule this re-inspection.
- 2.20.5. The Tenant is required to complete all items on the punch list identified as required prior to the opening. The punch list is deemed to include all items described by this manual, whether listed or not. If the Tenant, its consultants or contractors fail to complete required punch list items prior to opening, WCAA reserves the right, at its sole discretion, to either;
 - Complete the work at its cost and back charge the Tenant, or
 - Close the Premises until all outstanding items are completed.
- 2.20.6. The Tenant is required to obtain a Certificate of Occupancy from the City of Romulus, and other jurisdictions having authority, prior to opening. Copy of the Tenant's Certificate of Occupancy must be submitted to WCAA representatives.
- 2.20.7. Upon completion of the project site restoration shall be the burden of the contractor. This restoration includes, but is not limited to, removal of all temporary trailers, temporary fencing, portable toilet, dumpsters, temporary fuel storage containers, cutting and cap of all temporary utility connections at their point of origin, and any other items deemed necessary by the WCAA. Final inspection and approval of the site by the WCAA Fire Marshal, WCAA Operations, WCAA Security and the WCAA Inspector must be obtained prior to occupancy and use of the building.
- 2.20.8. The Tenant is required to furnish As-Built drawing files and other documentation required to the WCAA within 90 days of completion of the Improvements.

Attachments

ATTACHMENT A – Managing Wildlife at Airports

USDA APHIS WS

Appendix W

PLANTS ATTRACTIVE TO WILDLIFE

Listings within groups are in order of extent of use, which in some cases may be affected by availability.

Plants Extensively Used as Food by Wildlife^{1, 2}

Woody Plants

alder	<u>Alnus</u> spp.
aspen	<u>Populus</u> spp.
beech	<u>Fagus grandifolia</u>
birch	<u>Betula</u> spp.
blackberry.....	<u>Rubus</u> spp.
blackgum.....	<u>Nyssa sulvatica</u>
blueberry	<u>Vaccinium</u> spp.
cedar	<u>Juniperus</u> spp.
dogwood.....	<u>Cornus</u> spp.
Douglas-fir.....	<u>Pseudotsuga taxifolia</u>
elderberry	<u>Sambucus</u> spp.
fir	<u>Abies</u> spp.
gooseberry	<u>Grossularia</u>
grape	<u>Vitis</u> spp.
greenbrier.....	<u>Smilax</u> spp.
hackberry	<u>Celtis</u> spp.
holly.....	<u>Ilex</u> spp.
manzanita.....	<u>Arctostaphylos</u> spp
maple	<u>Acer</u> spp.
mesquite.....	<u>Prosopis</u> spp.
mulberry	<u>Morus</u> spp.
oak	<u>Quercus</u> spp.
persimmon	<u>Diospyros</u> spp.
pine	<u>Pinus</u> spp.
poison ivy	<u>Toxicodendron radicans</u>
pricklypear.....	<u>Opuntia</u> spp.
sagebrush	<u>Artemisia</u> spp.
saltbush.....	<u>Atriplex</u> spp.
serviceberry.....	<u>Amelanchier</u> spp.
snowberry.....	<u>Symphoricarpos</u>

¹ Martin, A.C., H.S. Zim, and A.L. Nelson. 1961. American wildlife and plants. Dover Publications, N.Y. 500 pp.

² Lefebvre, P.W., and D.F. Mott. 1987. Reducing bird/aircraft hazards through control of bird nesting, roosting, perching, and feeding. Section of Bird Control, Denver Wildl. Res. Ctr., ADC/APHIS/USDA, Denver, CO., Bird Damage Res. Rept. 390. 91 pp.

spruce Picea spp.
 sumac..... Rhus spp.
 virginia creeper..... Parthenocissus spp.
 wild cherry Prunus spp.
 willow..... Salix spp.

Upland Weeds and Shrubs

bluegrass..... Poa spp.
 bristlegrass..... Setaria spp.
 brome grass Bromus spp.
 chickweed Sterllaria media
 clover..... Trifolium spp.
 crabgrass Digitaria spp.
 deervetch Lotus spp.
 doveweed..... Croton spp.
 dropseed grass Sporobolus spp.
 fescue..... Festuca spp.
 filaree Erodium spp.
 goosefoot Chenopodium spp.
 grama grass Bouteloua spp.
 knotweed..... Polygonum spp.
 oats Avena spp.
 panic grass..... Panicum spp.
 pigweed..... Amaranthus spp.
 ragweed Ambrosia spp.
 Russian thistle..... Salsola kali
 sedge Carex spp.
 sunflower..... Helianthus spp.
 tarweed Madia spp. and Hemizonia spp.
 turkey mullein Eremocarpus setigerus

Marsh and Aquatic Plants

algae Chlorophyta
 arrowhead Sagittaria spp.
 bulrush Scirpus spp.
 burreed..... Sparganium spp.
 cordgrass Spartina spp.
 duckweed Lemna spp.
 horned-pondweed Zannichellia palustris
 muskgrass..... Chara spp.
 naiad Najas spp.
 pondweed..... Potamogeton spp.
 saltgrass..... Distichlis spp.
 smartweed..... Polygonum spp.
 spikerush..... Eleocharis spp.
 water lily Nymphaea spp.
 widgeongrass Ruppia maritime
 wildcelery Vallisneria spiralis
 wildmillet..... Echinochloa spp.
 wildrice Zizania aquatica

Cultivated Plants

alfalfa.....	<u>Medicago sativa</u>
apple	<u>Malus pumila</u>
barley	<u>Hordeum vulgare</u>
cherry	<u>Prunus</u> spp.
corn	<u>Zea mays</u>
grape	<u>Vitis</u>
oats	<u>Avena sativa</u>
rice	<u>Oryza sativa</u>
sorghum	<u>Sorghum vulgare</u>
wheat.....	<u>Triticum</u> spp.

Ornamental Trees and Shrubs Attractive to Birds^{3, 4}

Serviceberry	<u>Amelanchier canadensis</u>
Alleghany serviceberry.....	<u>A. laevis</u>
Yellowbirch.....	<u>Betula lutea</u>
Gray birch.....	<u>B. populifolia</u>
River birch.....	<u>B. nigra</u>
Paper birch.....	<u>B. papyrifera</u>
Western white birch.....	<u>B. commutate</u>
Flowering dogwood.....	<u>Cornus florida</u>
Japanese dogwood.....	<u>C. kousa</u>
Cornelian cherry.....	<u>C. mas</u>
Pacific dogwood.....	<u>C. nuttali</u>
Cockspur thorn.....	<u>Crataegus crus-galli</u>
Toba hawthorn	<u>C. x mordenesis</u> "Toba"
English hawthorn.....	<u>C. oxyacantha</u>
Paul's scarlet hawthorn	<u>C. sp.</u>
Cutleaf peashrub.....	<u>Caragana arborescens</u>
Weeping Caragana	<u>C. arborescens</u>
Tidy caragana	<u>C. microphylla</u>
Silverleaf dogwood.....	<u>Cornus alba</u>
Siberian dogwood	<u>C. alba</u>
Yellowdoe dogwood.....	<u>C. alba</u>
Red osier dogwood	<u>C. stolonifera</u>
Yellow twig dogwood.....	<u>C. stolonifera</u>
Peking cotoneaster	<u>Cotoneaster acutifolia</u>
Early cotoneaster	<u>C. adpressa praecox</u>
Rockspray cotoneaster	<u>C. horizontalis</u>
Russian olive.....	<u>Eleagnus angustifolia</u>
American beech	<u>Fagus grandifolia</u>

³ Thomas, W.A. (Coordinator). 1977. Airport grounds development and maintenance manual. Airports and Construction Services Directorate (Canada).

⁴ Lefebvre, P.W., and D.F. Mott. 1987. Reducing bird/aircraft hazards through control of bird nesting, roosting, perching, and feeding. Section of Bird Control, Denver Wildl. Res. Ctr., ADC/APHIS/USDA, Denver, CO., Bird Damage Res. Rept. 390. 91 pp.

Purple beech	<u>F. sylvatica</u>
Weeping birch	<u>F. sylvatica</u>
Betchel crabapple	<u>Malus ioensis</u>
Pissard plum	<u>Prunus cerasifers</u>
Amur choke cherry	<u>P. maackii</u>
May Day tree	<u>P. padus commutate</u>
Autumn Flowering Higan cherry	<u>P. subhirtella</u>
Shubert choke cherry	<u>P. virginiana</u>
White cedar	<u>Thuja occidentalis</u>
Hedge cotoneaster	<u>C. lucida</u>
Witchhazel	<u>Hamamelis virginiana</u>
Oregon grape	<u>Mahonia aquifolium</u>
Virginia creeper	<u>Parthenocissus quinquenfolia</u>
Western sand cherry	<u>P. tomentosa</u>
Flowering almond	<u>P. triloba</u>
Alpine currant	<u>Ribes alpinum</u>
Austrian brier rose	<u>Rosa foetida</u>
Shining rose	<u>R. nitida</u>
Redleaf rose	<u>R. rubrifolia</u>
Burnett rose	<u>R. spinosissima</u>
Korean spice viburnum	<u>Viburnum carlesii</u>
Wayfaring tree	<u>V. lantana</u>
European highbush cherry	<u>V.</u>

ATTACHMENT "B" WCAA APPROVED BACKFLOW PREVENTION DEVICES

**APPROVED BACKFLOW DEVICES AFTER APRIL 1999
Approved Reduced Pressure Principle Type**

<u>Manufacturer</u>	<u>Model</u>	<u>Sizes</u>	<u>State Plumbing Board Approval-Cert. Issue Date</u>
AMES COMPANY	Models: 4001 SS 4001 SSN 4001 SSZ 5001 SS 5001 SSN 5001 SSZ	3", 4", 6"	10/27/99-

**Approved Double Check Valve Assemblies (or equivalent)
(low hazard application)**

<u>Manufacturer</u>	<u>Model</u>	<u>Sizes</u>	<u>State Plumbing Board Approval-Cert. Issue Date</u>
CONBRACO INDUSTRIES	CBBP	1/4", 3/8"	06/01/99 – 07/07/99
AMES COMPANY	Models: 2001SS 2001 SSN 2001 SSZ 3001 SS 3001 SSN 3001 SSZ	3", 4", 6", 8"	10/27/99 –

Approved Pressure Vacuum Breakers

<u>Manufacturer</u>	<u>Model</u>	<u>Sizes</u>	<u>State Plumbing Board Approval-Cert. Issue Date</u>
CONBRACO INDUSTRIES	PVB	1/2", 3/4", 1"	06/01/99 – 07/07/99
CONBRACO INDUSTRIES	SVB Series 4W-500	1/4", 3/8", 1/2"	03/21/00 – 05/03/00

Approved Ballcock Assemblies

<u>Manufacturer</u>	<u>Model</u>	<u>Sizes</u>	<u>State Plumbing Board Approval-Cert. Issue Date</u>
American Standard	3198		
HERSEY-SPARLING METER COMPANY	Beeco Model 6CM Beeco Model 10 Beeco Model 10V Beeco Model 12 Beeco Model 14 Beeco Model FRP Beeco Model FRP II	8", 10" 1", 1-1/4", 2", 3", 4" 3" 3/4" 3/4", 1", 1-1/2", 2", 2-1/2", 3" 3/4", 1" 3/4", 1", 1-1/4", 1-1/2", 2"	08/20/81 – 09/17/81 06/26/64 03/16/77 – 04/20/77 03/16/77 – 04/20/77 08/20/81 – 09/17/81

<u>Manufacturer</u>	<u>Model</u>	<u>Sizes</u>	<u>State Plumbing Board Approval-Cert. Issue Date</u>
LAWLER I.T.T. (See Braukmann Controls Corporation)	RZ3	3/4"	05/08/75
	RZ4	1"	05/08/75
	RZ5	1-1/2"	05/08/75
	RZ6	1-1/2"	05/08/75
	RZ8	2"	05/08/75
	RZ12	3"	12/21/77
	RZ16	4"	12/21/77
	RZ24	6"	12/21/77
	RZ32	8"	12/21/77
	RZ40	10"	12/21/77
MUELLER	H 9506 RPZ	4", 6", 8", 10"	06/11/85 – 06/27/85
NEPTUNE WATER METER COMPANY (See Wilkins Regulator Company, a Division of Zurn Industries)			
ORION INDUSTRIES (Formerly – Toro)	80-0059	3/4"	02/25/76 – 03/17/76
	9-2770	1"	02/25/76 – 03/17/76
	80-0069	1-1/2"	02/25/76 – 03/17/76
	9-2929	2"	02/25/76 – 03/17/76
	BRP	3/4", 1"	09/21/77
	BRP	3", 4"	04/19/79 – 05/18/79
RAIN BIRD BACKFLOW PREVENTION (Manufactured by Watts Regulator)	RP-075	3/4"	05/13/76 – 06/09/76
	RP-100	1"	05/13/76 – 06/09/76
	RP-125	1-1/4"	05/13/76 – 06/09/76
	RP-150	1-1/2"	05/13/76 – 06/09/76
	RP-200	2"	05/13/76 – 06/09/76
	RP-250	2-1/2"	05/13/76 – 06/09/76
	RP-300	3"	05/13/76 – 06/09/76
	RP-400	4"	05/13/76 – 06/09/76
	RP-600	6"	05/13/76 – 06/09/76
RPA Series	3/4", 1", 1-1/4", 1-1/2", 2" 2-1/2", 3", 4", 6", 8", 10"	05/06/82 – 05/13/82	
RICHWELL VALVE COMPANY	Commercial Model BF	3/4", 1"	10/08/74
ROCKWELL INTERNATIONAL	701 RP	1-1/2", 2", 2-1/2", 3", 4", 6"	02/16/78 – 03/15/78
ROYAL COACK BUCKNER	24000 Series	3/4", 1", 1-1/4", 1-1/2", 2"	06/06/90 – 07/11/90
SINGER (Merrix Sales, Inc.)	53-BP	1/2", 3/4", 2-1/2", 3", 4", 6", 8", 10"	05/18/78 – 06/28/78

<u>Manufacturer</u>	<u>Model</u>	<u>Sizes</u>	<u>State Plumbing Board Approval-Cert. Issue Date</u>
WATTS REGULATOR COMPANY	Series 900	3/4", 1", 1-1/4"	01/14/72
	Series 900	1-1/2", 2"	02/23/72
	Series 900	4"	09/12/74
	Series 900	2-1/2", 3", 6"	03/09/76 – 03/17/76
	Series 909	4", 6", 8", 10"	06/12/80 – 07/10/80
	Series 909	3/4", 1", 1-1/4", 1-1/2", 2"	07/16/81 – 07/23/81
	Series 909	2-1/2", 3"	12/10/81 – 01/14/82
	Model 009	3/4", 1", 1-1/4", 1-1/2", 2"	12/07/88 – 01/04/89
	Model 009	2-1/2", 3"	06/06/90 – 07/11/90
	Model 009	1/2"	10/26/90 – 11/04/90
WILKINS REGULATOR COMPANY (a Division of Zurn Industries)	Model 575	3/4", 1", 2"	05/27/76 – 11/07/90
	Model 575	3", 4", 6"	09/11/80 – 11/07/90
	Model 575	1-1/4", 1-1/2", 2-1/2"	09/19/90 – 11/07/90
	Model 975	3/4", 1", 1-1/4", 1-1/2", 2", 3", 4", 8"	07/11/91 – 09/04/91
	Model 975	6", 10"	09/01/94 – 11/09/94
	Model 975-DA	2-1/2", 3", 4", 6"	09/01/94 – 11/09/94
	Model 975-XL	1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 2"	09/01/94 – 11/09/94
	Model 975-XLU	3/4", 1", 1-1/2", 2"	09/01/94

ATTACHMENT "C" – TENANT'S CHECKLIST

The Tenant and its contractor will not be allowed to start work at Detroit Metropolitan Wayne County Airport until the following checklist of items have been completed.

Item No.	Description	Date Received	Complete		Comments
			Yes	No	
1	Designers <ul style="list-style-type: none"> • Architectural • Mechanical • Electrical <i>Address & Phone Numbers Required</i>				
2	Contractors and Subcontractors <i>Address & Phone Numbers Required</i>				
3	Signed Lease Document c/w Related Drawings				
4	Approved Design				
5	WCAA's Work for Tenant <i>(List – Mechanical, Electrical, Flooring, etc.)</i>				
6	<ul style="list-style-type: none"> • Contractor's Insurance Certificate • Bond/Letter of Credit 				
7	Design & Construction Schedule <ul style="list-style-type: none"> • Dates for Key WCAA Work 				
8	Pre-Construction Meeting <ul style="list-style-type: none"> • WCAA/Tenant Contractor • Concession Architect Agenda: <ul style="list-style-type: none"> • Site, General • Common Areas • Labor Status • Schedule • Tenant Work Authorization Forms • First Aid Services • Access to Site • Laydown Area • Parking • Safety • Security 				

	<ul style="list-style-type: none"> • Garbage • Clean Up • Damage • Hours of Work • Temporary Services • Tenants Not Permitted to Work Outside the Tenant Space 				
9	Pre-Construction Inspection <ul style="list-style-type: none"> • Deficiency List 				
10	Orientation of Site Personnel				
11	Facility Alteration Permit				
12	Bond/Letter of Credit				

Completion

On completion of tenant fixturing, tenant must have completed and produced the following prior to occupancy and use of the premises.

1. Occupancy Permit
 - Final Acceptance from Authority Having Jurisdiction
 - Final Air Balance Report
 - Final Sprinkler Report
 - Fire Alarm and Life Safety Systems Report
2. As-built drawings and specifications.
3. Settle all accounts and pay all charges.

ATTACHMENT "D" – DETROIT METROPOLITAN WAYNE COUNTY AIRPORT PROCEDURES FOR BADGING CONTRACTORS

Contractor ID Badges may **only** be issued for approved Airport construction projects. Contractors will be required to provide Airport Security with a copy of an approved Wayne County Construction and Alteration Permit (C & A Permit), CIP Project Letter or MDOT letter before accessing the construction site.

All persons who enter a Restricted Area or the Air Operations Area (AOA) must have in their possession a valid Airport Identification Badge. Persons with a valid photo ID Badge will be allowed unescorted access to construction sites in Restricted Areas and on the AOA. Persons with non-photo ID Badges must be escorted at all times by someone with a photo ID Badge. (This escort is required when moving to and from a Restricted Area or AOA construction site and while on the site).

In addition, Ramp Drivers Safety Training is required prior to driving on the AOA. Contact Airfield Operations at 734-942-3832 to schedule the training.

OBTAINING CONTRACTOR BADGES:

CONTRACTOR INFORMATION SHEET

The contractor or sub-contractor must complete the Contractor Information Sheet. The information provided will permit the Airport Credentials Office to properly track contractor access and Badging requirements.

SUBCONTRACTOR INFORMATION

As part of identifying which contractors are involved in each contract, the **Prime Contractor** must provide a list identifying all sub-contractors under the project (***In the case of the Prime Contractor, the tenant the prime is providing service to shall provide an introduction letter identifying the company as the Prime Contractor and authorization for access.***). It is the responsibility of the Prime Contractor to update this information as additional subs are added to the project (Badging for the sub-contractors may not be processed until all information is provided.). This sub-contractor letter may be mailed or faxed, but must be on company letterhead.

BADGE APPLICATION FORM

At a minimum, all contractor foremen and supervisors must obtain photo ID Badges. All persons requesting photo ID badges must complete the "**BADGE APPLICATION FORM**". (NOTE: There is no application for non-photo ID Badges - request the number of non-photos needed in the Letter of Introduction. Individuals with non-photo ID badges must be escorted at all times.)

- a. All information must be completed and the application signed by the applicant (**BLACK INK ONLY**).
- b. In addition to the application process, all persons obtaining photo Badges are required to undergo a FBI-based criminal history check and Security Training prior to obtaining a Badge. (See "Badging Information" Packet).
- c. Two (2) forms of Identification, one of which must contain a photo and one must have been issued by a government agency, are required for processing of the applicant. (See "Badging Information" Packet).

DELEGATION OF AUTHORITY FORM

Complete the top portion of the Form and have the airline/tenant you are working for complete the bottom portion of the Form. This will allow the individuals listed on the form to authorize issuance of badges on behalf of the tenant or airline you are working for. It is the responsibility of the "Authorizing Signer" to verify that information on the application is correct and that the applicant is a current employee of the company and requires an Airport Photo ID. **Only a person possessing a DTW Photo ID Badge may be an Authorizing Signer.**

VEHICLE ACCESS

All vehicles must display a Vehicle Pass at all times while operating on the AOA or Restricted Area. These Passes are issued by the Airport Construction Office. Contact them at 734-942-3823 for further information.

All individuals operating a vehicle on the AOA must have completed and passed the driving section of the Security Training Test in addition to completing the Ramp Driver Safety Training provided by Airfield Operations (734-942-3832).

CONTRACTOR BADGE FEES

All Contractor badges require a \$300 deposit (refundable) and a \$20 processing fee (non-refundable) for each Badge, photo or non-photo. Payment should be made in the form of a Company check. Checks should be made out to "**Wayne County Airport Authority**". There is a \$300 deposit and a \$20 processing fee for replacement badges. ID Badge renewals cost \$15 and can be paid by cash, check, money order, or credit card.

Deposits collected on badges and keys will be forfeited if the badge/key(s) is not returned within 6 (six) months from the date of separation/deactivation.

ACCESS TO THE AOA OR RESTRICTED AREA

Access will be granted for the work area of the specified project only. If access is required into an Airline or tenant's leased space, the airline/tenant must submit a letter to the Airport authorizing the locations the contractor may have access to.

RETURN OF BADGES

All badges must be returned to Airport Security at the completion of the project or upon completion of the contractor portion of the project. **Badges may not be held for warranty work.** Refunds of the \$300.00 Badge deposits will be initiated upon return of Badges (allow 3-5 weeks for processing). All refunds will be returned to the Badged Company only. Refunds cannot be returned to an individual or to another contractor. Badges must be returned to Airport Security – Credentials Office within 6 months. Failure to return a badge within the 6 (six) month period will result in forfeiture of the \$300.00 deposit.

RULES FOR CONTRACTORS

The following requirements are derived from the Airport Security Plan and the Airport Ordinances and relate directly to contractor operations. The contractor and his employees are responsible for being aware of all the regulations that apply to operating on the Airport (not just to those detailed below).

1. It is the responsibility of the Contractor to maintain a barrier between public, Air Operations, Sterile and Restricted Areas. The contractor shall not prop open any doors or gates, which lead to a Restricted Area without prior approval by Airport Security.
2. The contractor shall not cut or remove any AOA fencing or create **any** opening which allows access to the AOA, Sterile, or Restricted Areas without prior approval of Airport Security. (If a temporary opening is made that would allow access into a Secure Area, the contractor shall erect a partition to prevent access from the public area until the area is inspected and approved by the Airport Security Unit.)
3. The contractor shall not install any openings/doors that would allow access to the AOA unless approved and tested by the Airport.
4. Individuals with Airport Photo ID Badges are responsible for being aware of the rules and procedures that apply to unescorted access privileges, as identified in the Airport Security Video, Security Pamphlet, and Contractor Rules and Regulations.
5. It is the prime contractor's responsibility to inform all his employees and sub-contractors of all security rules.
6. The Transportation Security Administration (TSA) monitors and tests the security at the Airport on a continuous basis. Violations of the Security Plan may result in a TSA violation and civil penalty of up to \$1,100.
7. If the Airport is assessed a civil penalty due to a security violation caused by the contractor, his employees or sub-contractors, the penalty will be passed on to the contractor.
8. It is a violation of the Airport Ordinances for an individual to loan another individual their Airport Photo ID, or to give any unauthorized individual a code or key that would allow access to the AOA or Restricted Area.
9. Violation of the Airport's Security Plan or Ordinances may result in the permanent suspension of access privileges, and possible civil or criminal penalties.
10. All individuals working inside or traversing the Air Operations Area (AOA), Sterile Area or Restricted Area shall have Airport issued Identification Badges. Unescorted access requires a photo ID Badge. (Allow two weeks for processing and security clearances.) Contractors may contact the Airport Security Credentials Office for specific Badge processing procedures. (734) 942-3606.
11. Contractors are to maintain a Daily Issuance Log for all Non-photo ID Badges.
12. Lost or Stolen ID's are to be immediately reported to the Airport Security Unit (734-942-3606).

13. All contractor employees with non-photo Airport ID Badges must be escorted at **all times** while on the AOA. It is the escort's responsibility to control those being escorted and to make them aware of any security requirements. (Workers issued non-photo Airport ID Badges may be subject to additional security clearances prior to entering the AOA or Sterile Areas)
14. Once the contractor's portion of the project is complete, all Airport ID badges shall be returned to the Airport Credentials Office. Airport ID Badges are issued for, and allow access to, **approved** construction projects as indicated in the Contractor's Letter of Introduction. Badges may not be retained for warranty work.
15. Secured Area access authority is for those activities related to the Airport approved project(s) for which the contractor is assigned. The contractor is prohibited from bringing personnel not directly working on the approved project(s) into the AOA, Sterile, and Restricted Areas.
16. Access through security doors and gates can be coordinated by contacting Airport Security. A letter for the permit holder authorizing specific door access within their leased space is required. Access to other tenant or airline location requires the permission of the specific lease-holder. Accessing doors or gates not specifically approved by the Airport is prohibited.
17. Entry and exit to AOA job sites shall be through manned vehicle checkpoints unless otherwise approved by Airport Security. Foot traffic via the vehicle checkpoints is strictly prohibited.
18. Airport ID Badges, both photo and non-photo, must be displayed on outer garments at all times while on the AOA or in the Restricted Areas.
19. Allowing an unauthorized/unbadged person into a Restricted, Sterile, or onto the Air Operations Area (AOA) is a serious violation of the Airport Security Plan and the Airport Ordinances.
20. The contractor shall prevent unauthorized pedestrian or vehicular access to the Airfield or Restricted Area from the construction site. Piggybacking is prohibited.
21. Contractor access is restricted to only the permit construction site and is not permitted access to any other Airfield or Restricted Area. All Airport ID Badges are to be returned when the contractor is completed on the project.
22. Challenging is an inquiry into whether an individual is authorized to be on the Air Operation Area (AOA) or in a Restricted Area. All employees are required to challenge unauthorized/unbadged individuals.
23. When not working, contractors are not permitted to access the AOA or Sterile Areas. The contractor is not permitted to utilize Airport ID Badges other than for specific work related activities at the Airport.
24. When travelling all workers must submit to passenger screening. The contractor is not permitted to bypass screening by bringing individuals or objects into the Sterile Area that will be going on a flight.

25. The contractor is **not** permitted to bring tools through a Security Screening Checkpoint. All tools while in the Sterile Area (beyond screening) shall be attended or secured in a locked toolbox. Materials that may be used as a weapon must be secured or attended at all times.
26. The contractor is not permitted to carry liquids, gels, or aerosols into the sterile area except for those liquids, gels, and aerosols that are necessary for operational or medical needs.
27. Ladders, scaffolding, equipment, or any other items that would allow an individual to gain access to the AOA, Sterile, or Restricted areas must not be left unattended.
28. The contractor shall not park any vehicles, nor store any construction materials, within six feet of the AOA perimeter fence, nor leave any vehicle or containers unattended within 300' of a terminal building.
29. To prevent possible explosive or incendiary devices from being hidden in areas close to Airport facilities, equipment, aircraft, or vehicles, all containers (tool boxes, storage containers, material trailers, dumpsters, porta-johns) shall not be left unsecured or unattended in public areas.
30. The contractor is not to paint over or tamper with any component of the Access Control System unless authorized by the Systems Manager.
31. Due to the sensitive nature of the information detailing Airport layout and security controls, control of construction drawings and specifications shall be maintained at all times.
32. The contractor shall not park any vehicles, nor store any construction materials within six feet of the AOA perimeter fence or adjacent to any building that forms part of the Airport perimeter.
33. All construction/installation vehicles, while on the AOA, shall have a DTW card displayed on the dashboard while positioned on the AOA. The DTW cards may be obtained from the Airport Airfield Operations Department.
34. All construction/installation vehicles shall display company logo affixed to the drivers' and passengers' door (Logos shall be no less than 12" x 12" and can be magnetic, printed or pasted on, but must be commercially made).

EXHIBIT "E" – VEHICLE ACCESS AND OPERATIONS CONSTRUCTION OFFICE

I. Vehicle Access (Contact Airport Operations 942-3685)

- A. No vehicle may be driven on the AOA/restricted area unless:
1. The driver of the vehicle has a valid airport **photo** ID badge, and;
 2. The vehicle displays authorized "DTW" (vehicle permit) on its dashboard at all times, and;
 3. The vehicle displays the company logo affixed to the exterior of the driver's and passenger's door and;
 - a. Logos shall be no less than 12" x 12";
 - b. Logos can be magnetic, printed or pasted on, but must be commercially made.
 4. The driver has taken and passed the written "Ramp Drivers Test".
- B. Issuance of permanent vehicle permit – "DTW"
5. A letter requesting vehicle access must be sent to the Airport Operations Department from the Tenant or prime contractor. (If a subcontractor is required for the project, the letter must still come from the Tenant or prime contractor) The letter must contain the following:
 - a. Location of the project;
 - b. Construction of Alteration (C/A) permit number;
 - c. Vehicles requiring access (make, model, and license plate number)'
 - d. Proof of Insurance.
 6. Only those vehicles that are essential for the job will be authorized to have permits, i.e. vehicles for the sake of convenience will not be permitted – example: tool vehicle.
- C. Transient construction vehicles will be issued a temporary DTW vehicle permit at the WCAA Operations construction office.
1. Those companies on the approved "Vendors List" and drivers who have a valid photo ID badge with the ramp driving endorsement will be assigned a temporary DTW vehicle permit and will be allowed to proceed **unescorted** to their destination.
 2. Those companies not on the approved "Vendors List", not having photo identification, or the ramp driving endorsement, will be issued a temporary DTW vehicle permit and a temporary visitor ID badge, and will require an escort from the vehicle checkpoint to their destination, and until they exit the secured area. Escorts will be provided by the contractor or sponsoring Tenant.
 3. Temporary DTW's and badges must be returned to the guard at the vehicle checkpoint upon exiting.

IV. Ramp Driving Test (contact Airport Operations 942-3685)

- A. Any individual operating a vehicle on the Air Operations Area (AOA) must have a **photo** ID badge and will be required to complete and pass (70% minimum correct) a written test on the operating rules for the AOA.
 - 1. A study guide entitled "Airport Rules and Regulations Manual" is available from the Airport Operations Department or Airport Director's Office.
 - 2. Individuals successfully passing this test will receive a Ramp Driving endorsement on their ID badge.
- B. Individuals operating vehicles on the AOA without the Ramp Driving endorsement may not only be subject to fines, but repeated offenses can result in the confiscation of the Airport ID badge and removal from the restricted area.

V. Escorting

- A. It is the prime contractor's responsibility to designate an employee with a **photo** Airport ID to be responsible for the escorting of all vendors/suppliers requiring access to the construction site. This individual will be knowledgeable in the applicable airport security and safety rules and regulations. The name of this individual will be provided to the Airport Security Manager and the Airside Manager of Airport Operations.

Note: Due to the size of some projects and the number of deliveries, more than one person may have to be assigned to the escorting function.

VI. Communications

- A. The prime contractor's job foreman/site superintendent, at the contractor's expense, shall have with him at all times a pager and/or cellular telephone. The prime contractor shall provide the pager/telephone numbers to the Airport Security Manager and the Airside Manager of Airport Operations.
- B. The designate prime contractor's employee(s) responsible for escorting, at the contractor's expense, carry with him at all time a pager and/or cellular telephone. The prime contractor shall provide the pager and/or cellular telephone numbers to the Airport Security Manager and the Airside Manager of Airport Operations.

VII. Issuance of Keys

- A. Any contractor requesting keys to a gate or door may obtain a "Key Request Form" from WCAA. This form identifies the door or gate number involved, along with the number of keys necessary. Once completed, it should be returned to the Airport Security Department.
- B. Locks and keys will only be issued to "Prime" contractors, not subcontractors.
- C. There is a refundable \$100.00 deposit for the use of each perimeter gate lock and two keys. Additional keys require an extra deposit of \$5.00 each. There is no deposit for door keys.

- D. Each key will be serialized, and the contractor, prior to issuance, must provide the Airport Security Department with the names of the individuals who will be holding the keys. Only those individuals with photo badges will be allowed to have keys.
- E. When the lock and keys are no longer needed, the keys should be returned by the contractor to the Airport Security Department for a refund of the original deposit.

VIII. Tenant Construction Office and Employee Parking

- A. A site for an office trailer should a contractor wish to set one up, may be designated, if space is available, but utilities to support the trailer will not be provided. Trailers must be skirted.

IX. Doors and Gates

- A. Doors and gates that allow public access to restricted areas of the Air Operations areas must be closed and locked at all times.
- B. Unlocked, open, and unattended security doors and gates are serious violations of the Airport Security Plan, and may result in FAA civil penalties.
- C. No openings shall be created in any Airport building, terminal, concourse, or perimeter fence that would allow public access to sterile, restricted or AOA areas without first securing the permission of the Airport Security or Airport Operations Department.

X. Challenging

Challenging is an inquiry into whether an individual is authorized to be on the AOA or in a restricted areas. **All** employees are required to challenge unauthorized individuals.

- A. Challenge an individual if they are not displaying and airport ID badge while in a restricted areas.
- B. If proper identification cannot be produced, the Wayne county Sheriff's Department (942-3600) and the Airport Operations Department (942-3685) should be notified.

FAILURE ON THE PART OF YOUR COMPANY OR EMPLOYEES TO COMPLY WITH THE ABOVE RULES, OR TO HELP OTHERS BYPASS THE SYSTEM WILL SERIOUSLY COMPROMISE SECURITY AT THE AIRPORT AND SUBJECT YOU TO POSSIBLE REVOCATION OF THE TENANT'S CONSTRUCTION/ALTERATION PERMIT AND/OR PROSECUTION.

ATTACHMENT "F" – FAA ACCESSIBILITY KEY PROVISIONS ATTACHMENT

1. 49 Code of Federal Regulations (CFR) section 27.71 addresses airport facility accessibility and assistance to persons with disabilities with respect to terminal facilities and services owned, leased or operated on any basis by commercial service airports. This includes parking and ground transportation facilities.

Airport operators shall ensure that terminal facilities and services shall be readily accessible to and usable by persons with disabilities, including those who use wheelchairs. The standard for accessibility for airports is the Americans with Disabilities Act Accessibility Guidelines (ADAAG), including section 10.4.1, New Construction, concerning airport facilities.

The airport shall ensure that there is an accessible path between the gate and the area from which the aircraft are boarded.

Inter-terminal transportation systems, including, but not limited to, shuttle vehicles and people movers shall comply with applicable requirements of the DOT's ADA rules.

2. Department of Transportation (DOT)/Federal Aviation Administration's (FAA) regulation implementing Section 504 of the Rehabilitation Act of 1973, as amended, in its Federal financial assistance programs is found at 49 CFR, Part 27. Section 27.72 and Air Carrier Access rules (14 CFR section 382.40) require airports and airlines to negotiate agreements ensuring that boarding lifts are available to assist passengers with disabilities in boarding certain aircraft that have a capacity of 19 or more seats where level-entry boarding is not available. The agreement should address respective responsibilities of the airport sponsor and the air carrier. Please ensure that you have these agreements in place with all carriers serving your airport whose aircraft are boarded from the tarmac. Airport sponsor personnel providing boarding assistance for passengers shall ensure that they are trained to proficiency in the use of the boarding assistance equipment used at the airport and appropriate boarding assistance procedures that safeguard the safety and dignity of passengers.

Primary airport sponsors, in cooperation with air carriers, should provide to persons with disabilities boarding assistance using mechanical lifts, ramps, or other suitable devices that do not require employees to lift or carry passengers up stairs. This is appropriate where level entry boarding by loading bridge or mobile lounge is not available, such as aircraft boarded from the tarmac via airstairs.

3. 49CFR section 37.33 addresses airport sponsor responsibilities under titles II and III of the ADA to airport transportation facilities providing designated public transportation or fixed route transportation systems.


Private jitney or shuttle services that provide transportation between the airport and destinations in the area in a demand-response and route deviation mode should provide accessible services

Airport sponsors contracting or licensing or permitting taxi services or other ground transportation should be aware of ADA accessibility requirements and in conjunction with any local authority, should hold these transportation services to appropriate ADA standards.

Taxi providers using a vehicle other than an automobile must have an accessible vehicle unless they can demonstrate equivalency as provided in 49 CFR Part 37. However, taxi providers using automobiles may not discriminate against persons with disabilities who are able to use the automobile.

4. The DOT's Air Carrier Access Act regulations at 14 CFR Part 382 outline air carriers' responsibilities for airport facilities and services that they own, lease, operate, or otherwise control. Contracts or leases between air carriers and airport operators concerning the use of airport facilities should identify the respective responsibilities for providing accessible facilities and services to individuals with disabilities.
5. Special Federal Aviation Regulation (SFAR) No. 106, Use of Certain Portable Oxygen Concentrator Devices Onboard Aircraft, dated July 12, 2005, and effective August 11, 2005, permits passengers to use certain portable oxygen concentrator devices on aircraft, provided certain conditions in the SFAR are satisfied. However, no aircraft operator is required to allow passengers to operate these devices onboard. Permitting certain portable oxygen concentrator devices is necessary to address the traveling needs of people on oxygen therapy. Should the passenger use a personal oxygen device or oxygen supplied by an outside provider, the airport operator, the passenger, and the supplier of medical oxygen (if any) should coordinate services to ensure passenger coverage both at the terminal and on the aircraft.
6. Per 49 CFR section 37.167(d), airports must permit service animals to accompany individuals with disabilities. Guidance concerning service animals in air transportation was revised in May 2003 and expands on earlier DOT guidance published in 1966. See <http://airconsumer.ost.dot.gov/rules/guidance.htm>. Although this guidance covers airlines, persons with service animals clearly must travel through airports to board their plane. It is important that the airport operators, air carriers, and the service animal community discuss and plan how assistance and access to relief areas will be achieved. Therefore airport operators should be familiar with this guidance.

ATTACHMENT "G" – WCAA CONSTRUCTION/ALTERATION PERMIT APPLICATION

	APPLICATION FOR CONSTRUCTION OR ALTERATION Wayne County Airport Authority For Detroit Metropolitan Wayne County and Willow Run Airports (Airport Tenants only)		For Airport Use Only	
			C/A Permit No.	
			WCAA Reference No.	
<p>INSTRUCTIONS: Use this form to apply for a Wayne County Airport Authority Construction/Alteration Permit to construct, enlarge, renovate, alter or remove <u>any</u> site or facility within the limits of Detroit Metropolitan Wayne County Airport or Willow Run Airport. <u>This application must be accompanied with ten (10) sets of design reports, plans and specifications</u> that describe the proposed work. Send completed application with original signature and accompanying documentation to: Wayne County Airport Authority; Planning, Design and Construction Office; Detroit Metropolitan Wayne County Airport; L.C. Smith Terminal – Mezzanine; Detroit, Michigan 48242. Application must be typed or printed using ink.</p>				
1. Applicant Information (Tenant)				
a. Official Name of Applicant <i>(Airport Tenants only)</i>				
b. Mailing Address <i>(Number, Street, City & Zip)</i>				
c. Applicant's Contact Person <i>(Authorized employee/agent)</i>				
d. Phone ()	e. Fax ()	f. E-mail Address		
2. Contractor Information				
a. Prime Contractor <i>(or other to perform work)</i>				
b. Mailing Address <i>(Number, Street, City & Zip)</i>				
c. Contact Person				
d. Phone ()	e. Fax ()	f. E-mail Address		
3. Proposed Project Information				
a. Name of Building/Site to be Altered	b. Airport Building Number	c. Airport <i>(Check one)</i> <input type="checkbox"/> DTW <input type="checkbox"/> YIP		
d. Area/Space of Building/Site affected by Proposed Project	e. Purpose of Construction or Alteration			
f. Description of Work to be Performed <i>(use additional sheet if necessary)</i>		Check Box if Additional Sheet is Attached <input type="checkbox"/>		
g. Estimated Design/Engineering Cost <i>(US Dollars)</i> \$	h. Estimated Construction Cost <i>(US Dollars)</i> \$			
i. Estimated Furnishing/Equipment Cost <i>(US Dollars)</i> \$	j. Bond Amount, if applicable <i>(US Dollars)</i> \$			
k. Submitted with this Construction or Alteration Application are the following: <input type="checkbox"/> FAA Form 7460-1 <input type="checkbox"/> Insurance Certificate <input type="checkbox"/> Performance Bond <input type="checkbox"/> Labor and Material Bonds				
4. Applicant Authorization				
All work shall be done at no expense to the Wayne County Airport Authority or the County of Wayne, and the applicant agrees to reimburse said Authority and County for damage to property of the Authority and the County. Applicant assumes any and all liabilities and further agrees to (1) Save harmless and indemnify the Airport Authority and the County; (2) Comply with all conditions under which a Construction or Alteration Permit is granted; (3) Pay the Authority any required review, inspection and permit fees within ten days of billing therefore, (4) Notify the Authority's Planning Design and Construction Office of the date the above work is to be commenced and the date the work is to be completed.				
a. Applicant's Signature <i>(Airport Tenants only)</i>			b. Date	
c. Applicant's Name			d. Title	

INSTRUCTIONS FOR COMPLETING WCAA CONSTRUCTION/ALTERATION PERMIT APPLICATION:

- 1. APPLICANT INFORMATION (Tenant)**
 - a. Indicate complete, official name of tenant only.
 - b. Provide full address of tenant's primary contact person. Must be an employee of the tenant.
 - c. Provide full name, and title of tenant's primary contact person.
 - d. Phone number of tenant's primary contact person.
 - e. Fax number for tenant's primary contact person.
 - f. E-mail address for tenant's primary contact person.

- 2. CONTRACTOR INFORMATION**
 - a. List name of contractor/company hired under contract with the tenant listed in Section 1. This entity will be responsible for obtaining bonds and insurance only for the project listed in Section 3 (see insurance and bond requirements).
 - b. Provide complete mailing address of prime contractor listed in 2a.
 - c. List prime contractor's main contact person or field contact person for this project. This person must be responsible for coordinating all daily activity as well as providing needed documentation including drawings, bonds, insurance, punch lists and any correspondence for the project listed in Section 3.
 - d. Phone number for contact person listed in Section 2c.
 - e. Fax number for contact person listed in Section 2c.
 - f. E-mail address for contact person listed in Section 2c.

- 3. PROPOSED PROJECT INFORMATION**
 - a. Actual name of structure or building site (surrounding area of building) where modification is being requested.
 - b. Provide official Airport building number as assigned by the WCAA.
 - c. Check appropriate box to indicate airport location of work to be performed, i.e., DTW – Detroit Metropolitan YIP – Willow Run.
 - d. List official space/room number for site, as assigned by the WCAA. If this is not available, indicate building area where construction/alteration is being requested or a description of the area, on site, which will be affected by the modification.
 - e. Briefly indicate the goal to be accomplished by the project.
 - f. Describe the work to be performed, including a summary of tasks involved to complete the project. If this is a Maintenance project, provide list of Maintenance tasks required. Check Box and attach sheet if additional space is needed in order to accurately describe all work required and tasks involved.
 - g. Provide an estimate of all costs (U.S. dollars) associated with the development of construction documents relating to the project.
 - h. Provide an estimate of contracted costs (U.S. dollars) anticipated to develop the project through completion.
 - i. Check box and submit appropriate documentation, as required, with the application:
 - FAA Form 7460-1 - Must be completed and filed with the FAA for an airspace review only if the scope of work is outside an existing structure and involves the use of construction equipment which has the potential to be higher than the structures adjacent to the area of work, i.e., a crane, scaffolding, lift, backhoe, etc.
 - Insurance Certificate – Refer to “Insurance and Bonds Requirements” attachment. As specified in the attachment, proof of insurance is required when a contractor is planning to perform work within the jurisdiction of the WCAA. If direct employees of the tenant are performing the work, insurance will not be required.
 - Performance Bond and Labor and Material Bonds - Refer to “Insurance and Bonds Requirements” attachment. As specified in the attachment, these Bonds may be required to be issued by the contractor.

- 4. APPLICANT AUTHORIZATION**
 - a. Application must be signed by person shown as applicant's contact person in Section 1c.
 - b. Indicate date application was signed.
 - c. Print or type legal name of applicant's contact person per signature in 4a.
 - d. Provide corporate title of applicant's contact person within tenant's organization.

Questions? – Contact Michael J. Rudzinski, AIA, NCARB Senior Airport Project Architect (734) 247-7036 or Elaine Adams, Permit Coordinator (734) 942-3674.

ATTACHMENT “H” – INSURANCE AND BONDS REQUIREMENTS

The following are Wayne County Airport Authority specific requirements that must be included in all submittals for insurance and bonds. **These documents should be faxed to (734) 247-7138 for review**; the airport will contact the tenant or contractor to notify of required changes and once the documents are corrected and approved, originals must be submitted to the Airport.

INSURANCE CERTIFICATES

1. Comprehensive General Liability Policies for Bodily Injury and Property Damage Coverage with a combined single limit of not less than \$1,000,000.00 per occurrence for landside (job site location) and \$5,000,000.00 per occurrence for the Airfield Operations Area (AOA). The policy must be written on an “occurrence” basis (not “claims made” basis).
2. Automobile Liability Policies for Bodily Injury and Property Damage Coverage with a single combined limit of \$1,000,000.00 per occurrence for landside (job site location) and \$5,000,000.00 per occurrence for the Airfield Operations Area (AOA). This policy must also be written on an as “occurrence” basis.
3. Workers’ Compensation Insurance, as required by the State of Michigan, and Employer’s Liability Insurance with limits not less than \$500,000.00. **Also required here is a notation of ‘partners, proprietors, executive officers and/or owners’ to be included or excluded. (If excluded, those individuals are not to perform any work on job site.)**
4. In addition to any Tenant requirements, the certificate must state that **‘The County of Wayne’ and ‘The Wayne County Airport Authority’ is included as an additional insured on both General Liability and Automobile Liability.** (May be noted in the description box). **Copies of endorsements must be provided and include the policy numbers or confirmation from the underwriter that request for the ‘additional insured’ will not be denied.** It is not required to list addresses on endorsement pages but if included; addresses must read as follows:

The County of Wayne	and	The Wayne County Airport Authority
600 Randolph		Planning, Facilities Mgmt.& Construction
Risk Mgmt. Division		L.C. Smith Terminal Mezzanine
Detroit MI 48226		Detroit, MI 48242
5. **Certificate Holder’s Box should read as follows:**
The Wayne County Airport Authority
Planning, Facilities Management & Construction
L.C. Smith Terminal – Mezzanine
Detroit, MI 48242
6. Insurance Certificates must include the Construction/Alteration Permit Number. **Please call before faxing documents if you need this number.**
7. **CANCELLATION NOTICE:** This clause must provide for at least 30 days unconditional advance written notice to the address above. **All certificates must have words “endeavor to” and from “but failure to.....through representatives” (end) crossed out.**

WCAA INSURANCE AND BOND REQUIREMENTS (CONTINUED)

PAYMENT AND PERFORMANCE BONDS (AIA 311 ONLY)

1. Payment and Performance Bonds will be required when a contract amount exceeds \$5,000.00 unless otherwise stated by the WCAA.
2. **SUBMIT AIA 311 FORMS ONLY - BONDS ON ANY OTHER FORMS ARE UNACCEPTABLE.**
3. Make Payment and Performance Bonds payable to the 'Tenant' of the Airport in an amount not less than 100% of the contract amount for Concessions at the McNamara Terminal and not less than 50% of the contract amount for all other projects.
4. **The Wayne County Airport Authority must not be listed as the "Obligee" and unless otherwise authorized by the Wayne County Airport Authority, the WCAA must not be listed as a "Dual Obligee".** The obligee is the 'Tenant' of the Airport whom the contractor is performing the work for. (i.e. NWA, Paradies Metro Ventures, Hertz Rent A Car, etc.)
5. **Bonds must contain the Construction/Alteration Permit Number.**

Please contact Elaine Adams at (734) 942-3674 if you have any questions.
Fax all required documentation to (734) 247-7138.

TENANT SURETY REQUIREMENTS:

As of _____, _____ all WCAA Tenant Construction Projects will require a Tenant Surety. Prior to issuance of a WCAA Construction/Alteration (C/A) Permit, the Tenant is required to submit a surety to ensure that all C/A Permit Conditions of Approval are met including the provision of as-built drawings. This surety may be in the form of a Performance Bond using the AIA A311 format or a cashier's check. The amount of the surety is to be one-half percent (½ %) of the total construction cost or five hundred dollars (\$500.00), whichever is greatest. Surety will be subject to review and approval by WCAA Corporation Counsel. **Tenant must forward the original to the WCAA, at least 48 hours prior to issuance of a C/A Permit, to:**

Elaine Adams, Permit Coordinator
Wayne County Airport Authority
L.C. Smith Terminal
Mezzanine Level
Detroit, MI 48242

ATTACHMENT "I" – WAYNE COUNTY AIRPORT AUTHORITY
ALARM ACCOUNT REQUEST FORM

Date alarm is expected to go into service: _____

Subscriber Information

Subscriber Name: _____

Address: _____

Phone: _____

Contact: _____

Contact Phone: _____

Dealer Information

Dealer Name: _____

Address: _____

City: _____

Phone: _____

24 hr. Phone _____

Transmitter Information

Type: _____

<u>Zone</u>	<u>Description</u>	<u>Signal ID</u>	<u>Signal type</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	<u>24 hr. test*</u>

NOTE: Include all possible alarms that transmitter could report

All zones will be tested for functionality and accuracy before being placed online

