



**DENTON AIRPORT**  
**THE NORTH TEXAS AIRPORT OF CHOICE**

*in conjunction with*

City of Denton Building Inspections  
City of Denton Fire Marshal's Office

# **Airport Development Guide**

Revised February 2006

## **WELCOME TO DENTON AIRPORT**

The City of Denton is pleased that you are interested in developing at Denton Airport. Staff members are committed to working with you to ensure a smooth development process. The following information is intended to serve as a guide to help you navigate the development process at the airport. This packet contains most, if not all of the forms and applications needed to develop your project.

It is important that airport staff, the tenant and the contractor have a good working relationship. We firmly believe that your success is directly related to our success, and we look forward to ensuring that the relationships formed during the development process will create a foundation for success throughout your tenure at Denton Airport.

Once again, thank you for choosing to develop at Denton Airport. We look forward to working with you. A list of names and numbers associated with developing at Denton Airport is included in the Appendix as Attachment A.

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## **SECTION 1 – REQUIREMENTS FOR AIRCRAFT RELATED OCCUPANCIES**

The City of Denton strongly advises any one who is considering constructing a building at the Denton Airport to set up a pre-design meeting through the Planning Department prior to preparing construction drawings.

However, if you wish to proceed with plan preparation without a pre-design meeting, the City has compiled an “Aircraft Development Guide” which is available through the Airport, the Fire Department or through Building Inspections. This guide details requirements that are specific to aircraft related occupancies. It is compiled from the latest editions of the International Codes as adopted by the City of Denton. These codes include the Building, Fire, Mechanical, Plumbing, and Energy Conservation codes as well as the National Electrical Code and NFPA 409.

Although this guide has been compiled to help answer many of the basic questions you may have when designing your building, it is not intended to be used as a substitute for the applicable codes and will not answer every technical question that may arise when designing an aircraft related project. This is one of many reasons why we continue to advocate the use of the pre-design process as the best source for information concerning the design of all projects. Preparing plans that include fire suppression systems or fire alarm systems must be designed by a State of Texas licensed designer.

### **Design Requirements**

The State of Texas has numerous laws, which apply to all construction projects within the state. These laws regulate everything from who can design a project to how it must be designed. The following is a brief list of some of the laws, which may govern your project.

### **Architectural Barriers Act**

The State of Texas has created the “Texas Accessibility Standards” which have been approved by the Federal Government for use within the state to determine compliance with handicap accessibility requirements of the Americans with Disabilities Act. The Texas Department of Licensing and Regulations (TDLR) is the state agency charged with the over-site of these standards. All projects within the state are required to comply with the requirements set forth in the standards. However, only those projects with a total construction cost of \$50,000.00 or more are required to actually submit plans to TDLR for review and comment. All applicants for projects, which meet the \$50,000 threshold, must provide proof that the plans have been submitted to TDLR for review before a permit may be issued.

### **Architectural Practices Act**

Due to the complex nature of the requirements under this law, the Texas Architectural Review Board has created a flow chart that may be used in order to determine which projects will be required to follow the law and more specifically, what aspects of the law

each project will be required to follow. This flow chart is included as Attachment A-1 at the end of this guide. Any other questions concerning the requirements for Architects sealed plans should be referred to the Texas Architectural Review Board.

### **Engineering Practices Act**

Again, due to the complex nature of the requirements under this law, the Texas Engineering Review Board has also created a flow chart that may be used in order to determine which projects will be required to follow the law and more specifically, what aspects of the law each project will be required to follow. This flow chart is included as Attachment A-2 at the end of this guide. The basic requirements are that plans for any non-residential building over 5,000 square feet in area must be stamped by an engineer licensed to practice engineering in the State of Texas. This requirement pertains to all aspects of construction including structural, mechanical, electrical and plumbing. Any other questions concerning the requirements for Engineers sealed plans should be referred to the Texas Engineering Review Board.

### **Specific Code Requirements**

The 2003 International Building Code (2003 IBC) divides aircraft hangars into four different categories. These are 1) Residential Aircraft Hangars 2) Aircraft Storage Hangars 3) Aircraft Maintenance Hangars and 4) Aircraft Paint Hangars. Category one, residential aircraft hangars, are those, which are “less than 2000 sq. ft. and less than 20 ft. in height, constructed on a one or two family residential lot...” These hangars, by their basic definition, will not be built on any airport property. However, each of the other 3 categories of aircraft hangars could possibly be built at the Denton Airport. The requirements for each of the categories escalates with the intensity of the uses allowed. Also, the requirements for each category are cumulative. Those required for each lesser category are also required for the more intense uses.

In addition, Section 412 of the 2003 IBC contains requirements, which are specific to aircraft related occupancies. A copy of this section has been included as Attachment A-3 at the end of this guide. The requirements found in this section are in addition to the other requirements relative to the use and occupancy classification of the structure. One of the most stringent requirements found in this section is the fact that any exterior wall located within 30 feet of a property line, lot line or public way must be 2-hour rated construction. Due to the lot configurations and the proximity of the aircraft hangars currently located at the airport, almost all exterior walls except those adjacent to taxiways and access roads will be required to be of 2-Hr. rated construction.

The plans for the hangar must include the UL approved assembly number for the required 2-Hr wall (these may be found on the Underwriters Laboratory web site at [www.ul.com](http://www.ul.com)) as well as construction details for the wall. This section also requires that the floors of the hangar be graded to drain. The code does not stipulate that floor drains shall discharge through an oil separator to the sewer or to an outside-vented sump.

This section also requires that any heating equipment, other than unit heaters, must be installed within a 2-Hr. enclosure. The enclosure must be accessed from the exterior of the building or through a vestibule providing a two-doorway separation. However, there is an exception to the two-doorway requirement which allows a single door provided the ignition source for the equipment is located a minimum of 18” above the floor.

### **Aircraft Storage Hangars Occupancy Classification S-2**

An aircraft storage hangar is the most basic hangar found in the code. Most commercial hangars leased and or constructed for personal use fall under this category. Also, those hangars that are used for simply storing commercial aircraft fall under this category. There are numerous requirements throughout the code for an S-2 occupancy. The main areas of concern include construction type required, allowable height and area and separation of uses within the building. The different categories of construction type are found in section 602 of the International Building Code. This section has been included as Attachment A-4 at the end of this guide. The information on the allowable height and area of the proposed building may be found in Table 503 of the IBC.

The IBC also allows numerous exceptions and modifications to the requirements found in Table 503. In order to determine whether your building meets any of these exceptions, please consult the table and the corresponding exceptions included as Attachment A-5 at the end of this guide. The requirements for separation between uses can be found in Table 302.3.3 of the IBC. However, the International Building Code is much more flexible than the old Uniform Building Code when dealing with occupancy separation requirements. Section 302.3 of the IBC allows the person designing the building to choose how they wish to deal with occupancy separation. The designer can simply follow the table and provide the required separation or they can choose to design the building as what the code calls a non-separated use. However, in order to design a building as a non-separated use, the building must meet a number of other requirements throughout the code. Due to the complex nature of these requirements, it is recommended that anyone choosing to build a hangar under the non-separated use requirements, consult a design professional in order to make sure that the project meets all the requirements applicable within the code.

### **Aircraft Maintenance Hangars Occupancy Classification S-1**

The major difference between the requirements for aircraft maintenance hangars and aircraft storage hangars is in the classification of the structure. Maintenance hangars must meet the requirements for an S-1 occupancy as opposed to an S-2 occupancy for storage hangars. Review the attached tables (Attachment A-6) to determine the requirements for your building. One problem that we have encountered in the past arises when an applicant wishes to convert a single compartment of a T-Hangar building into either a maintenance or a painting facility. As a general rule, we have allowed T-Hangar buildings to be classified as a single occupancy in much the same way as we would a parking garage. However, when a portion of the building is converted to a different use, that portion of the building would be considered a separate occupancy and would therefore be required to meet all code requirements including occupancy separation,

sprinkler requirements etc. This would require the addition of fire barriers and, depending upon the size of the space in question, possibly sprinkler systems as well.

Aircraft painting operations where the quantities of materials used or stored on site do not exceed those listed in Table 307.7(1) are also classified as S-1 occupancies. However, depending upon the types of systems used in the painting operation, as well as the location of the building relative to other buildings on the site, numerous other requirements found throughout the code would apply. In light of the complicated nature of these requirements, the City of Denton Building Inspections Division strongly recommends that anyone wishing to construct or convert any facility at the Denton Airport for use as an aircraft painting facility should contact our office to set up a pre-design meeting in order to discuss these code requirements.

### **Aircraft Paint Hangars Occupancy Classification S-1 or H-2**

Aircraft painting operations where the quantities of materials used or stored on site exceed those listed in Table 307.7(1) are classified as H-2 occupancies. The H in the designation stands for “Hazardous Occupancy” and the number 2 is the category designation. Detailed requirements for all hazardous occupancies can be found in Section 415 of the 2000 IBC. Section 416 of the code also provides requirements for application of flammable finishes and section 417 contains requirements for drying rooms. These sections have been included as Attachment A-7 at the end of this guide. Depending upon the types of systems used in the painting operation, the quantities of materials used or stored on site, and the location of the building relative to other buildings on the site, numerous other requirements found throughout the code would apply.

In light of the complicated nature of these requirements, the City of Denton Building Inspections Division strongly recommends that anyone wishing to construct or convert any facility at the Denton Airport for use as an aircraft painting facility should contact our office to set up a pre-design meeting in order to discuss these code requirements. In addition, anyone considering an operation that would fall under the Hazardous Occupancy classification must consult an architect and an engineer for the design and construction of the proposed facility.

After receiving the appropriate approvals from the Denton Airport to proceed with your construction project, here are a few things you should know in order to help your project run smoothly.

## **SECTION 2 – THE DEVELOPMENT PROCESS OVERVIEW**

The development process at Denton Airport typically takes a total of 13-28 weeks to complete. The process begins with identifying a lot for development and ends with a certificate of occupation being issued and the lessee occupying the building. The process is broken into three phases.

### **Phase 1**

Phase 1 typically last 1 to 4 weeks and is driven by the lessee. The purpose of Phase 1 is to determine the needs of the prospective lessee and to identify a site on the airport that best meets the needs of the lessee and the current and future needs of Denton Airport. At the end of Phase 1, the lessee will have an understanding of the requirements needed to complete their proposed development and staff members will have an understanding of the intended use and purpose of the development. Depending on the lessee's motivation, this phase of the development process can be drastically shortened.

### **Phase 2**

Phase 2 typically takes 4 to 8 weeks and is completed through a cooperative effort between airport staff and the lessee. During Phase 2, the lessee and airport staff negotiate the lease agreement. The lessee provides airport staff the information they need to process the lease agreement for Legal Department's review, Airport Advisory Board review and City Council approval. At the end of Phase 2, the lessee will have an approved lease agreement and will be able to apply for a building permit.

### **Phase 3**

Phase 3 is the permitting and construction phase of the development process. Phase 3 typically takes 8 to 16 weeks to complete and is a two-step process. Step one is the permitting phase and usually takes 2-4 weeks for a building permit to be issued. Step two is the actual construction component to Phase 3. The construction element usually takes 4-16 weeks to complete, but this timeframe is highly dependent on the caliber/complexity of the building, weather and other uncontrollable variables. At the end of Phase 3, the lessee will have completed the proposed development, and the City of Denton will issue a Certificate of Occupation. Phase 3 is not an ending to a process, but rather a transition to a long-term relationship between the lessee and Denton Airport.

The development process flowchart labeled Attachment B in the Appendix and the development checklist labeled Attachment C in the Appendix, are helpful tools to steer you through the development process at the Denton Airport.



## **Permitting**

When putting together plans to submit for approval, be sure to include 8 complete sets of plans. Each set of plans should include the following:

A. Properly Sealed Architectural Plans including: (see attached copies of flow charts for Architectural and Engineering Practices Act(s) for required seals)

1. Structural drawings.
2. Mechanical, Electrical and Plumbing plans (if applicable). These plans should include electrical load calculations.
3. Floor plan of the building including uses for each area.
4. Exterior elevations.
5. Engineered foundation plans sealed by the designing engineer along with a statement that the foundation is designed for the soil conditions at the proposed site.
6. UL assembly numbers for any fire rated walls or partitions.

AND

B. Civil Plans including:

1. Site plan: Should include the building footprint, set backs from property lines, existing and proposed easements, proposed parking spaces with dimensions, and location of solid waste container with proposed screening.
2. Utility Site Plan: Should include all proposed water, sewer and electric service lines on the site.
3. City Water/Wastewater location map: (to be available at the Airport Office)
4. 8 1/2 x 11 Fire Lane Map: (if fire lanes are required)
5. Parking Lot Layout: Should include structural details for the proposed parking and drive isle surfaces.
6. Site Grading and Drainage Plan: Should include storm water runoff calculations for culverts or underground drainage flues. A licensed Engineer should provide calculations.

AND

C. Miscellaneous Forms

1. Proof of submittal to TDLR (required for projects valued over \$50,000).
2. Commercial Energy Code Compliance Reports.

When plans are complete and ready for submittal, please complete the Commercial Permit Application in the information packet obtained from the Denton Airport. The

application along with the 8 sets of plans should then be submitted to the City of Denton Building Inspections office located in City Hall West at 221 N. Elm St.

After plans have been submitted, they will be distributed to the appropriate departments for review. The plans will be reviewed and comments made by each applicable department. Plan review comments will be available within 10 to 20 business days depending upon the complexity of the project under review.

Upon completion of the initial plan review; our office will notify you that the permit is ready or that comments are available and revisions will be required. In some instances, a revision of the plans will be required in order to insure that all standards have been met. All plan review comments are available on our website at [www.cityofdenton.com](http://www.cityofdenton.com) or you may request a hard copy of all comments from the Building Inspections office. Should you receive comments that require revisions, plans will need to be revised and re-submitted to our office for a second review. The number of plans required for each re-submittal will depend upon the number of departments requiring revisions. Plan review comments for re-submittals will be available within 10 working days of the date they are re-submitted.

Upon the approval of the plans for your project, and payment of the applicable permit fees (see attached fee schedule), you will be issued a Building Permit for your project.

For more information about the permitting process contact Rodney Patterson, Commercial Plans Examiner, City of Denton Building Inspections at (940) 349-8360.

### **Inspections**

After a permit has been issued for your project and construction begins, there are certain inspections that will be required during each stage of construction for your project. It will be the responsibility of the contractor to insure that the proper inspections are requested and approved prior to proceeding with construction.

The following is a list of required inspections as well as a brief description of what will be inspected during each inspection. Attached you will find step-by-step instructions on how to request inspections through the Building Inspections Request Line as well as a complete list of all inspections performed by the Building Inspections Division. Only the inspections listed below are required for all projects.

However, depending on the complexity of the project, inspections may be broken down into more specialized increments in order to enable the project to proceed through the process more efficiently.

### List of Mandatory Inspections

<b>#20 T-Pole/Saw Service</b>	The temporary power pole to be used by workers during construction. (Contractor must submit a complete Commercial Request for Service form before utilities will be connected)
<b>#13 Plumbing Rough/Water &amp; Sewer</b>	All in-ground plumbing including water and drain lines under slab and between slab and meter or sewer tie in. (contact plumber for requirements)
<b>#3 Foundation</b>	Foundation plan must be available on site at time of inspection. A Form Board Survey may also be required. Check comments on permit for Form Board requirement. Inspectors look at all steel and/or cables and compare to plan and make sure all copper is protected
<b>#43 Seconds Inspection</b>	Includes all electrical, plumbing, mechanical and framing in walls and possibly above ceiling. Call for seconds inspection before sheetrock is installed. If lay in ceiling tiles are to be installed, contractor may ask for walls only to be inspected at this stage so that sheetrock may be installed. If so, be sure to call for #50 Above Ceiling Inspection before installing ceiling tiles.
<b>#23 Temporary Power or #17 Temporary Gas or #49Temp. Utilities</b> (includes gas and electric)	Contractor <u>may</u> call for either of these inspections in order to have electric and/or gas meters installed prior to final inspection. All electrical must be substantially complete or capped and covered. Gas service lines must be pressurized with an air test at time of inspection. (Contact plumber for requirements)
<b>#44 Final Inspection</b>	All construction should be complete including site work. Also call Fire Department and Engineering (if applicable) for final approval. Final approval from all departments is required before a Certificate of Occupancy will be issued. Also, the proposed occupant of the building must submit a complete Certificate of Occupancy form as well as a Commercial Request for Service in order to receive a Certificate of Occupancy and to have the utilities transferred into their name.

For more information about the permitting process contact Bryan Cole, Chief Building Inspector, City of Denton Building Inspections at (940) 349-8360.

**Important Note:** All plumbing, electrical and mechanical work must be performed by individuals who are properly licensed to do the work being performed. These individuals must register with the Building Official prior to starting work on your project.

### **SECTION 3 – FIRE CODE REQUIREMENTS FOR HANGAR CONSTRUCTION**

The City of Denton has adopted the 2000 International Fire Code (2000IFC) with local amendments. The 2000 IFC refers to the 2000 IBC for classification of aircraft hangars. These classifications include storage group 1 if it is used as a storage hangar. When the hangar is used as a repair area or refueling and defueling is being performed the hangar is classified as a hazardous 1 or 2 classification. When the hangar is used as a storage area and office or business occupancy the structure can have multiple occupancy classifications. This is important because area separation may be required and a fire suppression system may be required in all or part of the structure.

The City of Denton has amended the 2000 IFC in section 903 to require non-combustible construction of 10,000 sq ft. and larger to install a fire suppression system. Combustible construction 7,500 sq ft. or larger must install a fire suppression system. The reasoning behind these requirements is that the Fire Department feels with current staffing and deployment of equipment that we can safely fight a fire in structures with no suppression system up to 10,000 sq ft. of non-combustible and 7,500 sq ft. of combustible construction.

This amendment does not apply to aircraft hangars with the exception of a hangar that has multiple occupancies such as office/hangar, assembly/hangar or manufacturing/hangar occupancies. For example, if the hangar has an aircraft storage area of 12,000 sq ft. and office area of 3,500 sq ft. the office would have a suppression system but the hangar area would not. If the total aircraft storage area were open there would be no requirement for a suppression system.

The City of Denton has amended the 2000 IFC to include National Fire Protection Association Standard 409, (NFPA 409) for aircraft hangars. **This requirement is for the installation of fire suppression systems only.**

NFPA 409 classifies hangars in the following manner:

**Group I Aircraft Hangar.** A group I aircraft hangar shall have at least one of the following features and operating conditions:

- (1) An aircraft access door height over 28ft.
- (2) A single fire area in excess of 40,000 sq ft.
- (3) Provision for housing an aircraft with a tail height over 28 ft.

**Group II Aircraft Hangar.** A group II aircraft hangar shall have both of the following features:

- (1) An aircraft access door height of (28 ft.) or less
- (2) A single fire area for specific types of construction in accordance with Table 4.1.2

**Table 4.1.2 Fire Areas for Group II Aircraft Hangars**

<b>Type of Construction</b>	<b>Square Feet</b>
Type I (443) and (332)	30,000-40,000
Type II (222)	20,001-40,000
Type III (111), Type III (211) and Type IV (2HH)	15,001-40,000
Type II (000)	12,001-40,000
Type III (200)	12,001-40,000
Type V (111)	8,001-40,000
Type V (000)	5,001-40,000
* Single fire area inclusive	

**Group III Aircraft Hangar.** A group III hangar shall have both of the following features:

- (1) An aircraft access door height of (28 ft) or less.
- (2) A single fire area that measures up to the maximum square footage permitted for specific types of construction in accordance with Table 4.1.3.

**Table 4.1.3 Maximum Fire Areas for Group III Aircraft Hangars**

<b>Type of Construction</b>	<b>Square Feet</b>
Type I (443) and (332)	30,000
Type II (222)	20,000
Type III (111), Type III (211) and Type IV (2HH)	15,000
Type II (000)	12,000
Type III (200)	12,000
Type V (111)	8,000
Type V (000)	5,000
* Maximum single fire area	

**Group IV Aircraft Hangar.** A group IV aircraft hangar shall be a structure constructed of a membrane-covered rigid steel frame.

### **Fire Suppression Requirements**

The protection of aircraft storage and servicing areas for Group I aircraft hangars, shall include a fire suppression system in accordance with chapter 6 of NFPA 409.

The protection of aircraft storage and servicing areas of Group II aircraft hangars shall include a fire suppression system in accordance with Chapter 7 of NFPA 409.

The protection of aircraft storage and servicing areas for Group III aircraft hangars shall be constructed of any of the types of construction specified in NFPA 220. Group III hangars shall be limited to one story. Multi story hangars will be considered Group II type hangars. Where hazardous operations, including fuel transfer, welding, torch cutting, torch soldering, doping, and spray-painting, are performed in any Group III hangar, the group III hangar shall be protected with the fire protection specified in Chapter 7 of NFPA 409.

Group IV hangars having a hangar fire area greater than 12,000 sq ft. and housing fueled aircraft shall have a fire suppression system installed throughout.

### **Fire Lane Access**

Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into within the jurisdiction. Fire apparatus access roads shall be installed within 100 feet of all exterior portions of the building. The fire code official may increase this requirement to within 150 feet if the building has an approved fire suppression system.

Fire lanes are 20 feet wide and unobstructed. The lane is marked with a six inch red stripe painted on the pavement with four inch blocked white letters every twenty feet stating, "FIRE LANE NO PARKING".

### **Water Supply/Fire Hydrants**

Fire hydrant locations and distribution shall be in compliance with Appendix C of the 2000 IFC. See attached Appendix C of the 2000 IFC.

Fire Flow requirements shall be per Appendix B of the 2000 IFC. See attached Appendix B of the 2000 IFC.

### **Inspections**

Each Hangar will be inspected annually for compliance with the fire code. There is no charge for the initial inspection. If a violation is found and it is not corrected in the presence of the inspector a fee of \$15.00 per each 3,000 sq ft. will be assessed. Failure to comply with any correctional order or violation notification can result in a fine punishable up to \$2,000.00 per violation per day.

Fire suppression systems are required to be inspected in three areas underground piping, above ground piping and hydrostatic testing and is required to be witnessed by a fire inspector. The costs associated with these inspections are part of the permit fee. Fire alarm inspections are conducted with an acceptance test that is conducted when the contractor has completed their installation and testing. The cost associated with this inspection is covered when the permit is paid.

To schedule an inspection, contact the Fire Marshal's Office at 940-349-8863 24 hours in advance. Inspectors cannot accept payment in the field.

### **Permitting**

A construction permit for the underground and above ground installation of fire suppression systems is required. Likewise, a construction permit for the installation of fire alarm systems, and the installation of fuel dispensing or storage units is required. A construction permit is \$100.00.

An operational permit is required for hot works, fuel farms, fuel dispensing, and assembly occupancies that occur within or associated with hangars. An operational permit is \$200.00.

Applications for permits can be found online at [www.cityofdenton.com](http://www.cityofdenton.com) go to the fire department page and find prevention and look under permits.

### **Plan Review (Fire Systems)**

The Building Officials Office at 321 North Elm Street is the location where building construction plans should be delivered for review. Plans for the installation of fire lanes, fire suppression and detection systems, and flammable/combustible liquids storage and handling should be delivered at 332 E Hickory Street. Please provide at least 2 sets of plans and applicable cut/calculation sheets. Please allow for a ten (10) day turn around on the review of these plans.

### **Fueling Systems**

Fuel dispensing at any airport is inherently dangerous. Above ground storage tanks or underground storage tanks shall be in compliance with Chapter 34 of the 2000 IFC. This chapter is extensive and would need to be consulted if an individual or company wishes to dispense, use or sale flammable or combustible liquids in association with airport activities.

Some of the general requirements are that the installation of fuel storage whether below or above ground will require permitting per the 2000 IFC. Dispensing and usage of these fuels shall be permitted within and association with each hangar or business located on airport property.

Fuel storage and dispensing will need to be reviewed on a case-by-case basis. Plans and cut sheets of the materials used will need to be submitted for review by the fire department.

A Hazardous materials inventory plan and hazardous materials management plan will need to be submitted if flammable or combustible fluids are used or stored.



### **General Information Regarding Fire Protection at Denton Airport**

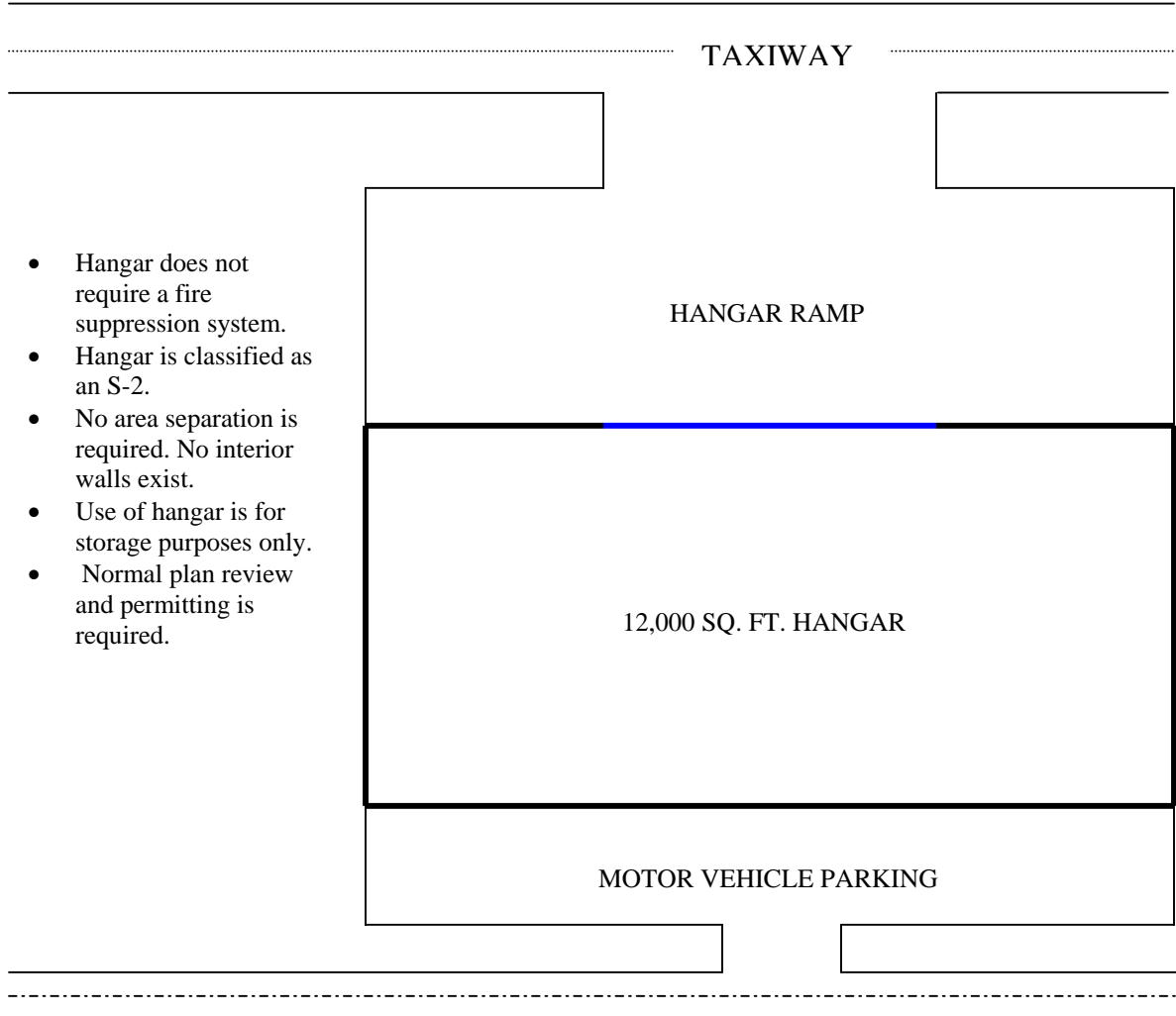
The Denton Fire Department will respond a one-alarm assignment to a reported fire in a structure at the airport. A one-alarm assignment will include two engines, one truck, one medic and one battalion chief. This assignment includes a minimum of 13 personnel. The Denton Fire Department has a fire station located at the intersection of I-35 E and McCormick Street. There is approximately a 7 – 10 minute response time for the responding units to the Denton Airport. The units responding are not crash fire rescue units.

Because the airport does not have a dedicated fire station on campus with crash fire rescue capabilities it creates a disadvantage for responding fire units. Most nationally recognized standards such as NFPA 409 and IBC/IFC assume that there is an adequate fire response for the particular hazard that is being regulated.

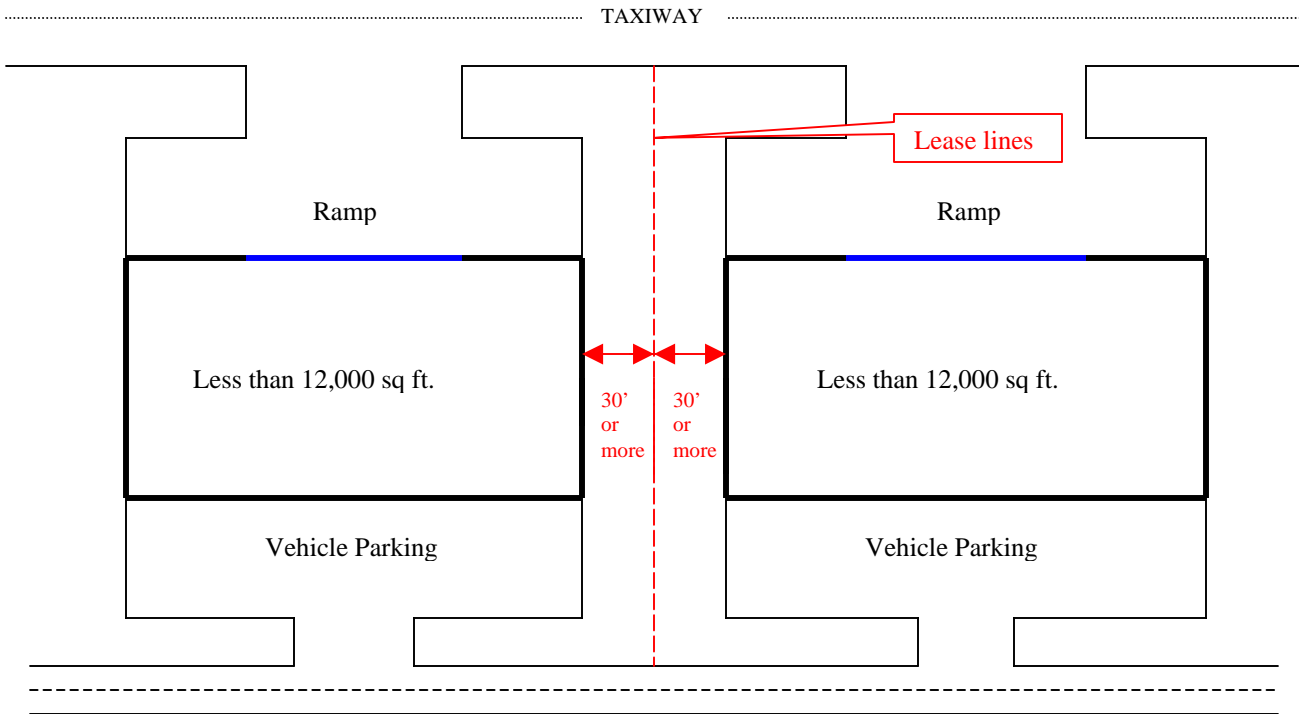
This reality places a heavier burden that the applicable codes and standards are not deviated from. The codes and standards are developed and written to provide a reasonably safe environment for an individual or company to conduct business. It is our goal to provide a reasonable approach to enforcing codes related to building and maintaining hangars at the Denton Airport.

## SECTION 4 – ILLUSTRATIONS

### Illustration One

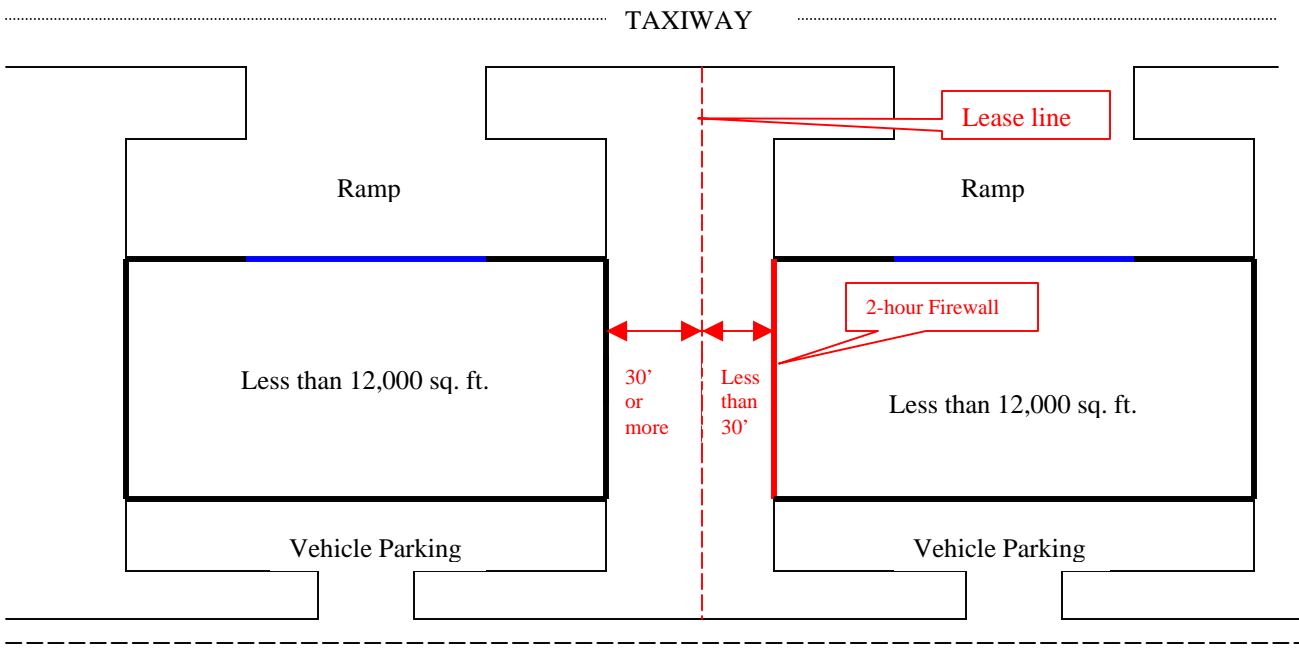


## Illustration Two



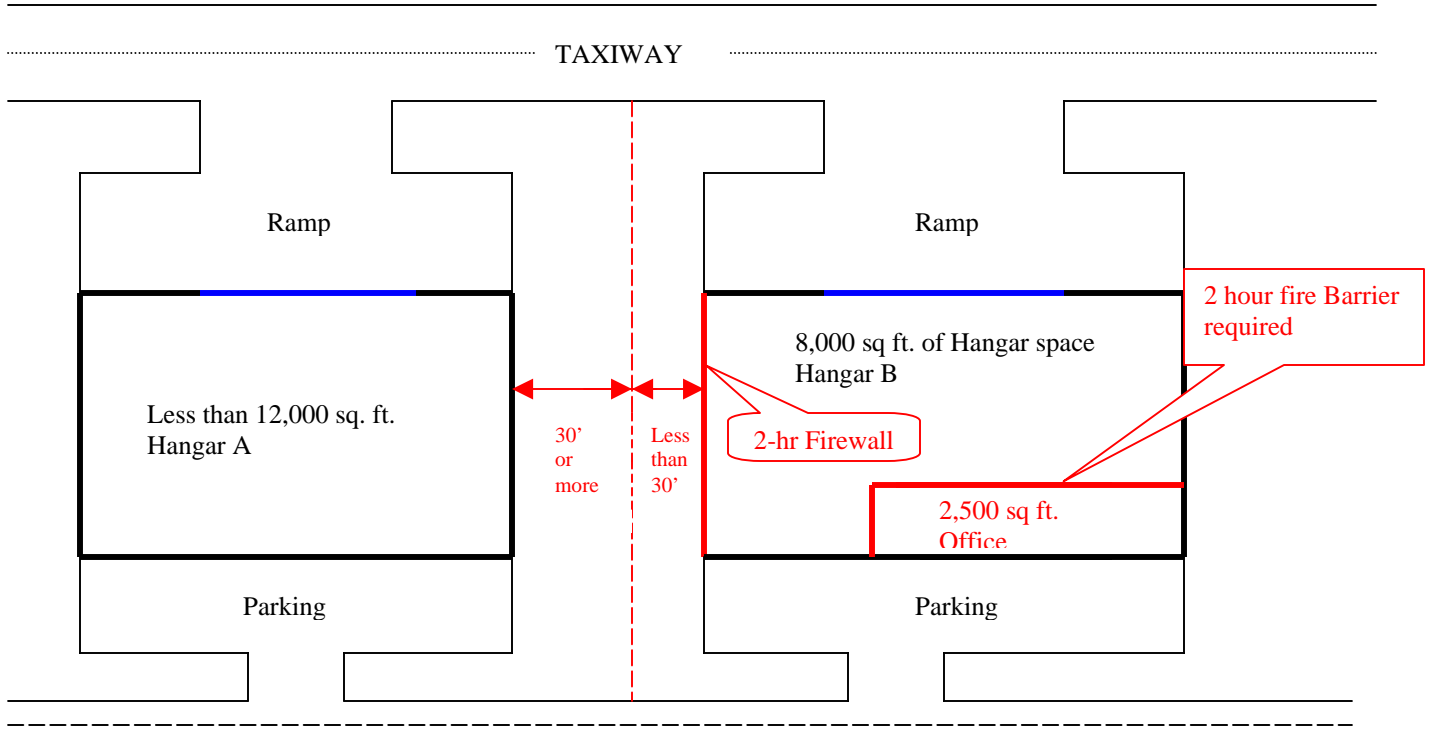
- Hangars are classified as a S-2.
  - No fire suppression requirement.
  - No exterior wall rating.
  - Hangar shall be used as storage only.
- If maintenance is conducted the classification changes to a S-2
  - No Fire Suppression Required
  - No exterior rating required
  - Hangar used for storage and light maintenance

## Illustration Three



- No fire suppression required
  - Classified as a S-2
  - Two hour Firewall required on hangar less than 30' from lot line
  - Hangar usage limited to storage only
- If welding, torch work, painting or heavy repairs are conducted the classification changes to an H
  - Fire Suppression system would be required
  - Exterior wall shall be a 3 hour firewall

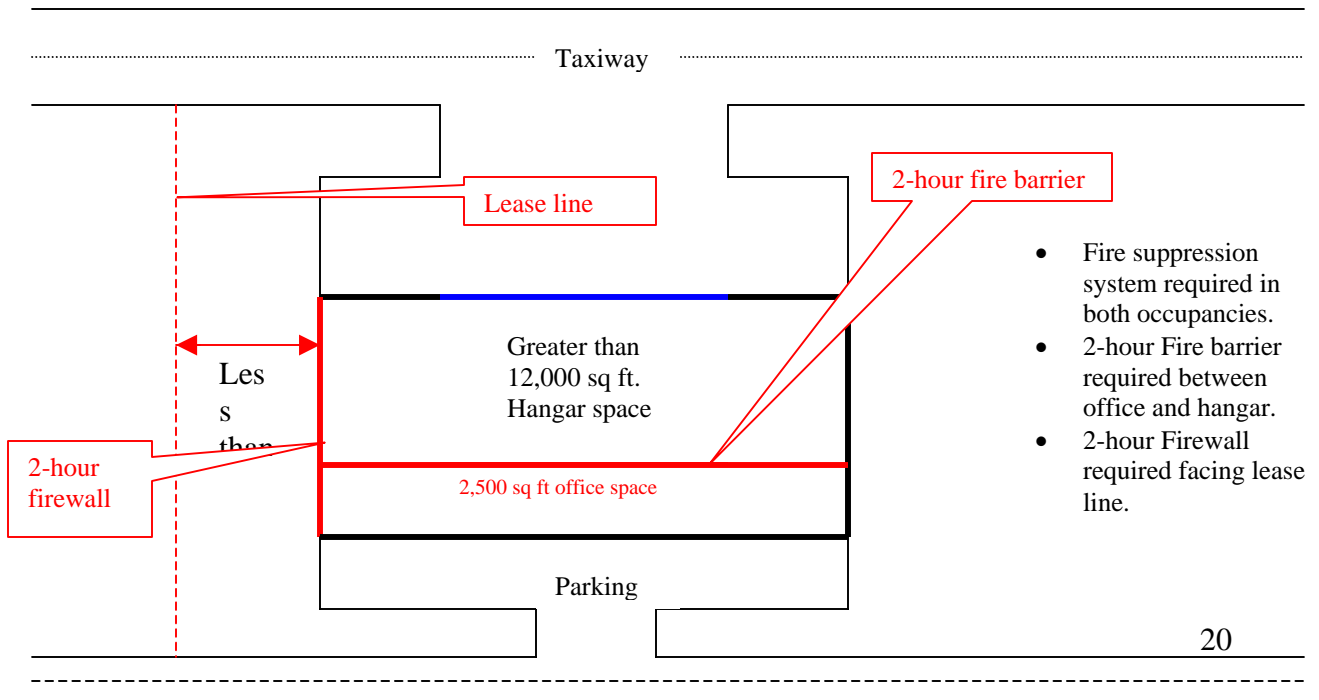
## Illustration Four



- Hangar A would not require fire suppression.
- Hangar A would not require the exterior wall to be rated.
- Hangar A would be classified as an S-1.

- Hangar B would require a fire suppression system in the office space only.
- The hangar area of Hangar B would be classified as a S-2, the office area would be classified as a B.
- A 2-hour fire barrier would be required between the S-2 and B occupancies.
- The exterior wall would need to be a 2-hour firewall

## Illustration Five



- Fire suppression system required in both occupancies.
- 2-hour Fire barrier required between office and hangar.
- 2-hour Firewall required facing lease line.

## APPENDIX

- A Development Related Contact Information
- B Development Process Flow Chart
- C Development Process Checklist
- D Commercial Building Permit Application
- E Parking Lot Permit Application
- A-1 Texas Board of Architectural Examiners Chart
- A-2 The Texas Engineering Practice Act
- A-3 2003 IBC Section 412
- A-4 Chapter 6 of the 2003 IBC
- A-5 Chapter 5 of the 2003 IBC
- A-6 Table 307.7 (1) 2003 IBC
- A-7 Section 414 2003 IBC
- A-8 Chapter 3 of the 2003 IBC

## ATTACHMENT A

### I. Denton Airport Contact Information

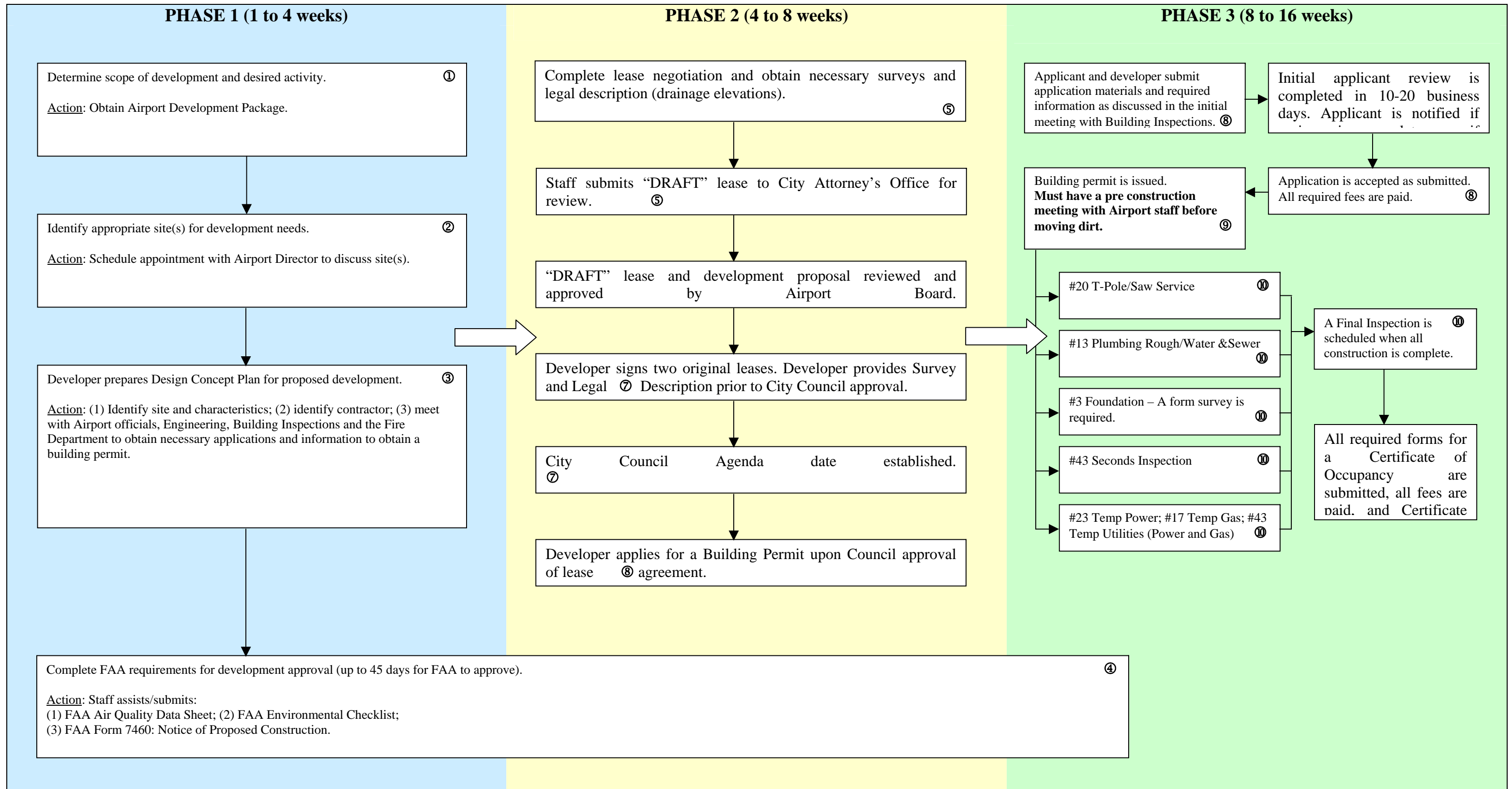
NAME	TITLE	CONTACT INFO
Mark Nelson	Chief Transportation Officer	(940) 349-7702 Office (940) 349-7289 Fax mark.nelson@cityofdenton.com
Tim Whitman	Airport Manager	(940) 349-7744 Office (940) 349-7289 Fax  Tim.Whitman@cityofdenton.com
Julie Mullins	Aviation Assistant	(940) 349-7736 Office Julie.Mullins@cityofdenton.com

### II. Other Development Related Contact Information

NAME	TITLE	CONTACT INFO
Rodney Patterson	Plans Reviewer Supervisor	(940) 349-8539 Office (940) 349-7208 Fax rodney.patterson@cityofdenton.com
Rick Jones	Fire Marshal	(940) 349-8860 Office (940) 349-8109 Fax rick.jones@cityofdenton.com
Kurt Hansen	Building Official	(940) 349-8362 Office (940) 349-7208 Fax
Mike Cagle	Chief Building Inspector	(940) 349-8371 Office (940) 349-7208 Fax mike.cagle@cityofdenton.com

**ATTACHMENT B**

**Development Review Process Flowchart**



FAA requirements must be met before construction can begin. The development process is a 13-28 week long process from a best-case scenario.

## ATTACHMENT C

### Denton Airport

#### Development Process Checklist

ITEM	DONE
<p><b>1. Determine scope of development and desired activity.</b>  <i>Action Item: Schedule meeting with Airport Director to discuss project and site needs.</i></p>	
<p><b>2. Discuss proposed development requirements with city staff.</b>  <i>Action Item: Schedule meeting with Airport, Building Inspections and Engineering (Airport staff will assist in scheduling meeting.)</i></p>	
<p><b>3. Prepare design concept plans as required by city staff.</b>  <i>Action Items: (1) Identify a general contractor if you have not selected one already;                      (2) Complete attached Commercial Building Permit;                      (3) Complete attached Parking Lot Permit;                      (4) Complete lot survey and legal description.</i></p>	
<p><b>4. Airport staff submits an FAA Form 7460-1 and corresponding environmental impacts.</b>  <i>Action Item: Airport staff will submit the appropriate forms and send you a copy. Staff will notify you when the FAA approves the development.</i></p>	
<p><b>5. Complete lease negotiation with Airport Director.</b>  <i>Action Item: Schedule a meeting with the Airport Director to discuss your lease agreement. Airport staff will submit lease to Legal for approval after negotiations are complete.</i></p>	
<p><b>6. Airport Advisory Board reviews development proposal and lease agreement.</b>  <i>Action Items: Airport staff will submit the lease agreement and development proposal to the Airport Advisory Board for review.</i></p>	
<p><b>7. The Airport Advisory Board recommends lease agreements for approval to the City Council.</b>  <i>Action Item: (1) Developer should have survey and legal description complete and submitted to Airport staff before lease agreement is sent to City Council for approval;                      (2) Airport staff will call you when the lease agreements are ready to be signed and will place the agreements on the next available Regular City Council Meeting agenda for Council approval. Staff will inform you when the lease will go before the Council for approval.</i></p>	
<p><b>8. Apply for a Building Permit.</b>  <i>Action Item: Upon Council approval of the lease agreement, you may submit the attached Commercial Building Permit and Parking Lot Permit and submit to Building Inspections.</i></p>	
<p><b>9. Attend a pre-construction meeting / Airport construction safety meeting.</b>  <i>Action Item: Schedule the meeting with airport staff to discuss construction safety requirements and construction equipment access at Denton Airport.</i></p>	
<p><b>10. Developer tracks Building Permit and inspection process on City's website, <a href="http://www.cityofdenton.com">www.cityofdenton.com</a></b>  <i>Action Items: (1) Schedule necessary inspections as required by Building Inspections;                      (2) Apply for a Certificate of Occupancy when Construction is complete.</i></p>	