AVIATION

ALLIANCE • MEACHAM • SPINKS

FORT WORTH AVIATION DEVELOPMENT GUIDE

UPDATED (OCT 2020)

Thank you for your interest in leasing airport property to construct aviation related facilities at one of our Fort Worth Airports. We are excited to provide you with this guide to assist you in the development process.

Table of Contents

Disclaimer: This guide is subject to change and is not all inclusive of every requirement imposed by the City of Fort Worth and/or the Aviation Department.

I. Development Process Checklist

Item		Estimated Date of Completion	Done
1.	**Determine scope of development and desired activity.** *Action Item: Schedule meeting with Airport Manager to discuss project and site needs.*		
2.	**Present and discuss proposed development with City staff.** *Action Item: Schedule meeting with Airport, Building Inspections, water, Fire, Forestry and Engineering (Airport staff will assist in scheduling meeting.) Complete Hangar Development Questionaire and submit to Airport Management*		
3.	**Prepare design concept plans as required by City staff.** *Action Items: (1) Identify a general contractor if you have not selected one already; (2) Complete Commercial Building Permit; (3) Complete lot survey and legal description by city approved surveyor.*		
4.	**Attend a pre-development conference with Planning and Development Department** *Action Item: Schedule the meeting with Planning to discuss all City requirements for building and construction. Pre-development conferences can be scheduled multiple times if needed.*		
5.	**Applicant submits an FAA Form 7460-1 and corresponding environmental impacts.** *Action Item: Once form completed, submit online to FAA at https://oeaaa.faa.gov. Staff will notify you when the FAA approves the development or if alterations must be completed. If proposal is objected, determine with assistance of Airport Manager if a Reimbursable Agreement with the FAA is necessary to mitigate concerns. Complete Catex form and submit to local FAA regional office.*		
6.	**Complete lease negotiation with Airport Manager.** *Action Item: Schedule a meeting with the Airport Management to discuss your lease agreement. Airport staff will submit lease to Legal for approval after negotiations are complete.*		
7.	**Aviation Advisory Board reviews Aviation Advisory Board Communication.** *Action Items: Airport staff will submit a communication to the Aviation Advisory Board for review.*		
8.	**The Aviation Advisory Board recommends communication for approval to the City Council.** *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. Once the lease agreements are signed, staff will place the Mayor and Council Communication on the next available regular City Council meeting agenda for Council review/approval. Staff will inform you when the communication will go before the Council for approval. Expect a 60 day timeframe for approval.*		

9.	**Apply for a Building Permit.** *Action Item: Upon Council approval of the lease agreement, you may submit the attached Commercial Building Permit and submit to Building Inspections.*		
10.	**Attend a pre-construction meeting / Airport construction safety meeting.** *Action Item: Schedule the meeting with airport staff to discuss construction safety requirements and construction equipment access at Airport.*		

II. Airport Development Procedures

The following development guidelines shall apply to those desiring to lease and build facilities on any of the City of Fort Worth Airports.

A. General

The Airport Layout Plan(s) (ALP) shall be adhered to. Any deviations from the ALP(s) shall be approved by the Department of Aviation. Subsequent to City Council approval, FAA Form 7460, Notice of Proposed Construction and Alteration shall be submitted to the Federal Aviation Administration (FAA) for their *review* and comment.

Other City departments affected by such deviation(s) shall be provided a site plan for individual departmental review and comment.

B. Site Plan Circulation

The developer must provide the following plans to the Aviation Department for Approval.

- Preliminary Concept Plans
- Design plans at the 90% stage
- Design plans at the 100% completed design stage (FINAL APPROVAL)

All plans submitted must include utilities. Upon completion of the project, the developer must provide electronic “As-Built” plans to the Aviation Department to include a completed site survey.

In addition to the Aviation Department approval of plans. The developer will submit Seven (7) copies of the engineer stamped site plans to the following City Departments:

- 2 copies to Department of Transportation/Public Works
- 2 copies to Water Department
- 2 copies to Fire Department (Fire Marshall's Office)

- 1 copy plus two sets of plans to Department of Planning & Development (Bldg Official's Office & Office of Development Coordinator)

The Office of the Development Coordinator in the Department of Planning & Development shall collect and coordinate all comments with the Director of the Aviation Department.

C. Site Plan Preparation

The site plan must show the information necessary for the various departmental reviews. The information shall include, but not be limited to the following:

1. A copy of the applicable plat map for the site even if the property is owned by the City of Fort Worth

2. A survey with site number identification and description as written by the city Survey Section, Department of Transportation/Public Works (T/PW)

3. A description of the access roads and parking lots to be provided for non-airport operational vehicles on the site plan.

4. Easements for utilities (both public and private) must be provided and shown on the site plan. Existing utilities on lease sites serving other sites must also be identified and shown on the site plan. Any existing utilities needing to be relocated fall under the sole responsibility of the developer including the coordination of all easements.

5. All hardstands, taxiways, access roads, buildings and any other operational airport facilities on an area around the property line equal to the height of the building or structure, but no less than ten (10) feet, shall be shown on the site plan.

6. The site plan shall show all site paving, parking, site ingress, egress and drainage. Drainage patterns shall be shown by surface elevations illustrated as contour lines at intervals no greater than one (1) foot both present and planned placed upon the site plan. Storm Water Pollution Prevention Plan shall be included with your drainage plan.

7. Fire lanes and fire hydrant locations shall be shown on the site plan. Fire lanes must be provided when the farthest point of a building is more than one-hundred and fifty (150) feet from any public street, highway, roadway, taxiway, ramp or hardstand. Fire lanes shall be a minimum of twenty (20) feet in width with a three (3) foot clear area on each side of the fire lane. Buildings on the site plan must be within a five hundred (500) foot fire hose lay, using the most direct route of access

from a fire hydrant. When more than one fire hydrant is required, the hydrants must be installed on a three hundred (300) foot radius along a direct line between hydrants. Eight (8) inch mains are required. Fire lane markings can have some deviation on the airside from the landside due to FAA marking requirements but must still be approved by the Fire Department.

8. A plan for sprinkler systems. Hangars greater than 12,000 sq. ft. require sprinkler systems. Hangars with 28 foot high doors or larger require foam suppression systems. Further details are available from the Fire Department in pre-development conferences. See Item 4 of checklist for info on scheduling a conference. Exceptions based on hangar usage can occur in special occasions. It is the Aviation Departments policy to make the highest and best use of land. Minimizing hangar size to circumvent fire suppression requirements will not be approved.

9. Floor Drains:

   Floor Drains within the hangar space may be required if there are going to be aircraft washing or similar operations within the hangar. If the hangar is only going to be used for aircraft, a floor drain is not required. Be sure to advise the Fire Department if the intended use is aircraft storage only and have them clarify the requirement beforehand.

   Buildings having floor drains (located in other than restrooms) connected, to the sanitary sewer, shall provide an oil water separator and inspection manholes on the site outside the building.

10. Compliance with FAA Regulation Part 77 is mandatory. Part 77 protects airspace and navigation from obstructions or interference. Any person/organization who intends to sponsor on-airport construction or construction within 5 miles of an airport must notify the FAA via a FAA Form 7460 available on oeaaa.faa.gov. Please see Item 5 of the checklist for further details.

11. A site location map on the sheet drawing containing the site plan.

12. A layout of fencing, security gates, and a plan for the separation of vehicles and aircraft. The airport standard fence can be referenced in Part II – Section L of this document.

13. Any new facility construction along an airport access roadway must be have a minimum set-back distance of 10ft from the roadway curb to the structure to allow for public utility easement pathways. All new leases abutting airport access roads must proceed all the way to the curb or the associated Right-of-way and all lease holders must maintain pavement, landscaping and aesthetics to the curb while not constructing any structure within the 10ft set-back utility pathway. Leases abutting

taxiways or taxilanes must proceed all the way to the Object Free Area for that particular Taxiway or Taxilane.

If the Fire Department requires a 30ft setback from lease boundary, contact the Aviation Department as this does not apply to City owned property. It is only intended for adjacent property owner boundaries.

The 30ft building to building setback requirement can be reduced with the installation of 2 hour fire walls.

14. Dumpster Containment: All new facilities must have a dumpster containment unit. This unit must include 3 walls and swinging metal doors. The walls and doors must be 8ft in height to completely obscure the dumpster from view. The structure exterior must match the primary facility being built. The unit must be large enough to accommodate the number of dumpsters or recycling containers needed by the facility.

D. Building Plan (Architectural Drawings)

Although additional information may be required by other City Departments for review, the minimum information necessary for Aviation departmental review is as follows:

1. Floor plans
2. Intended uses of internal spaces
3. Dimensions of all internal spaces
4. Roof plan
5. Building heights
6. Materials
7. Colors
8. Finishes
9. Lighting (Interior &Exterior)
10. Building area (square footage)
11. Any other information pertinent to the building(s) and facilities to be constructed
12. Dumpster containment structure

E. Hangar and Site Signage Requirements

Although additional information may be required by other City Departments for review, the minimum information necessary for Aviation Departmental review is as follows:

(signage cannot not be painted directly onto a building exterior)

1. Graphic layout
2. Size
3. Location on site
4. Construction details and materials
5. Color
6. Height (sign height and ground elevation to top)
7. If illuminated, indicate arrangement and type
8. Location sign (airport building location number)
9. Any other pertinent information

F. Landscape Plan Preparation/Requirements

The Department of Aviation requires a minimum level of landscaping to be installed with all new construction. Meacham Airport is a professional executive airport and strives for a best-in-class appearance. Having professionally landscaped facilities allows the airport to maintain that appearance. The landscaping plan must require trees, bushes and irrigated grass. A landscape plan must be provided as part of the site plan preparation to show applicable location and type of the following items:

1. Trees and shrubs, may require an FAA Form 7460 filed for the maximum expected height
2. Landscaping shall be conducive to area climate (i.e., hot and cold temperature conditions)
3. Ground cover (i.e., grass, mulch, zero scape)
4. All new development must include sidewalks/walkways, connecting adjacent parcels, as may be applicable and determined by the Aviation Department, to maximize pedestrian access.
5. Slope stabilization (retaining walls)
6. Grading
7. Landscaped area (square footage)
8. No artificial landscape materials
9. Any other pertinent information

This landscaping plan must be approved by the Department of Aviation prior to proceeding.

G. Architectural Design Guidelines

1. Materials

a. The number of materials used for the exterior of all buildings shall be kept to a minimum in order to achieve unity and simplicity. No more than two (2) basic building materials should be used in addition to glass. Buildings may be of metal

or masonry or a combination such as masonry viewed from landside and metal viewed from airside.

b. Suggested exterior materials are:

1. Concrete with a specialized textured finish
2. Brick, stone, clay tile
3. Stucco
4. Metal
5. Glass

2. Design

a. Rectangular building shapes are strongly recommended.

b. No storage or portable buildings are permitted unless approved by the Aviation Department. This prohibition does not include approved containment containers for storing environmentally regulated materials.

c. Gable type roof pitches are strongly recommended.

d. Free standing canopy type hangars are permitted (unenclosed structure) at the discretion of the City, only after justification for the construction of said hangars as opposed to enclosed hangars. Carports/canopies attached to permanent buildings are acceptable.

e. Buildings shall be (1) aligned parallel or perpendicular to the airport's Building Restriction Line (BRL), (2) located at a uniform setback distance from the BRL, and (3) compatible with adjacent development. The distance from the building's exterior wall to the BRL and angle of orientation to the BRL shall be shown on the site plan.

f. Any new permanent or temporary building to be constructed must provide a minimum of 5000 square feet of space for the activities contemplated to be performed.

g. Temporary buildings will be permitted at the discretion of the City, and with sufficient justification for said building, as opposed to a permanent structure. Temporary buildings to be constructed, must meet the minimum space requirements as set forth in this Article for construction of new buildings.

H. Plans and Specifications

Plans and specifications shall be approved by the following departments:

1. Department of Transportation/Public Works – All taxilanes, hardstands, roadways, parking lots, paved areas, drainage, site description(s) and numbering, and easement locations.

2. Water Department – Public water, sewer, and fire hydrants connected to public water sources.

3. Fire Department – Fire hydrants connected to private water sources. *******Note exact foam system in hangar changes*****

4. Department of Planning and Development – Building, water, and sewer (private), electrical, plumbing, mechanical, and sign.

5. FAA – Clearance and building heights.

I. Issuance of Building Permits

The issuance of building permits will be done after a lease has been approved. An application (as stated previously) shall be made as stated in paragraph B. Upon completion of site plan circulation, approval of the Building Plans and approval of the lease, the building permit may be issued.

J. Inspections

The following departments shall be contacted for inspections during construction stages:

1. Public Water and Sewer – Water Department

2. Private Water and Sewer – Development Department

3. Fire Hydrants on Public Water Systems – Water Department

4. Fire Hydrants on private Water Systems – Fire Department

5. Paving, Parking Lots, Roadways, Drainage Facilities, Ramps, Taxiways, and Runways – Aviation Department

6. Building Construction – Planning and Development Department

7. Final Inspections and Occupancy Permits (only after other departments have cleared their inspections) – Inspections Division

K. Colors

a. Predominant exterior colors shall be neutral, white, greys or earth tone and shall be compatible with adjacent development

b. Other colors may be used for accenting, trim, and signage and must be approved by the Department of Aviation.

c. Hangars are required to be fully painted as opposed to painting individual sections.

L. Fencing

a. Fencing along public roadways must meet the following specifications

Manufacturer: Ameristar Fencing.

Type: Steel Ornamental.

Fence Brand: Montage II. (Specifications are attached to this document)

b. All other fencing must be at a minimum black coated 6ft chain link fence with black coated 3-strand barbed wire on the top. **Some areas might require the Montage II fence when determined by the Aviation Department.**

c. All permanent fencing must include a 18” mow-strip. Refer to mow-strip specs.

d. All fencing layouts and plans must be reviewed and approved by the Department of Aviation and meet FAA Part 139 regulations and Transportation Security Agency Regulations (TFRs).

M. HVAC Systems/Industrial Equipment

a. All equipment both industrial and HVAC must be obscured or hidden from public view such as compressors or condenser units.

N. Gates and Operators

a. Material used for gates and operators shall match surrounding fence. Preferred operator for gates is a Hy-Security Slide Driver operator or similar.

O. Exterior Lighting

a. Exterior lighting must be positioned so as not to impair the vision of the Air Traffic Control Tower or aircraft operators utilizing the airport.

III. Resources

City of Fort Worth Departments

Aviation Department

Meacham Airport Administration
Desk: 817-392-5400, Fax: 817-392-5413

Spinks Airport Administration
Desk: 817-392-5430, Fax: 817-447-8334

Planning and Development Department

Annexations and Platting
Planning Manager
Desk: 817-392-8030, Fax: 817-392-7985

Pre-Development Conferences/Right-of-Way Encroachments
Development Project Coordinator
Desk: 817-392-2239, Fax: 817-392-7985

Board of Adjustment
Planner
Desk: 817-392-2414, Fax: 817-392-7526

Downtown Review Board, and Scenic Preservation
Desk: 817-392-8481, Fax: 817-392-7526

Zoning
Desk: 817-392-2495

Fire Construction Board of Appeals
Customer Service Specialist
Desk: 817-392-7842, Fax: 817-392-8116

Permitting
Customer Service Representatives
Main Telephone: 817-392-2222, Fax: 817-392-8116; IVR: 817-392-6370

Plans Exam
Assistant Building Official
Desk: 817-392-2590, Fax: 817-392-8116

Building Inspections
Gary Caldwell, Assistant Building Official
Desk: 817-392-8093; Fax: 817-392-8116

Electrical Inspections
Desk: 817-392-7830

Mechanical Inspections
Desk: 817-392-7886

Plumbing Inspections
Desk: 817-392-7980

Residential Inspections
Desk: 817-392-8793

Signage
Desk: 817-392-7830

Third Party Review and Inspection, Building Official
Desk: 817-392-7825

Comprehensive Plan Land Use
Desk: 817-392-8013

Historic Preservation
Desk: 817-392-8001
Desk: 817-392-5985

Urban Village Development Program
Desk: 817-392-8068
Desk: 817-392-7373

Transportation and Public Works Department

Floodplain Maps
Desk: 817-392-8426, Fax: 817-871-7854

City Infrastructure/Civil Plans – Review & Approval
Desk: 817-392-7959, Fax: 817-871-7854
Desk: 817-392-7818, Fax: 817-871-7854
Desk: 817-392-6250, Fax: 817-871-7854

Environmental Management Department

EPA Permit Requirements for Construction Sites 1-acre or greater
Desk: 817-561-3700, Fax: 817-871-5464
Desk: 817-561-3700/3701, Fax: 817-871-5464

Fire Department

Addressing
Desk: 817-871-6797, Fax: 817-871-6867

Inspections
Desk: 817-871-6835, Fax: 817-871-6867

Plat Review
Desk: 817-871-6845, Fax: 817-871-6867

Parks and Community Services Department

Design, Construction, Plan Review and Project Management- Park Development, City Construction Projects, and Utility Construction Review
Desk: 817-871-5746

Design and Construction Plan and Site Review for Tree Permitting, Planting, and Removal in the Right-of-Way and on City Property
Desk: 817-871-5705

Neighborhood Park Dedication Policy, Community Facility Agreements, Easements, Use Agreements, Staff Reports, and Plat Review
Desk: 817-871-5745

Park Policy and Management, Land Development, Park Development and Acquisition
Desk: 817-871-5745

Zoning/BOA
Desk: 817-871-5706

Transportation and Public Works Department

Real Property Management
Street/Easement Vacation & Land Valuation
Desk: 817-392-8538

Banners, Special Events
Desk: 817-871-7894, Fax: 817-871-8941

Drainage
Desk: 817-392-7901, Fax: 817-392-8092

Driveway Approaches / Parkway Permits
Desk: 817-392-6646, Fax: 817-870-4815

Master Thoroughfare Plan Amendments
Desk: 817-392-8701, Fax: 817-392-8092

Median Openings
Desk: 817-392-8701, Fax: 817-392-8092

Platting
Desk: 817-392-8701, Fax: 817-392-8092

Sidewalks
Desk: 817-392-8701

Signals, Signs and Markings
Desk: 817-392-6748, Fax 817-871-8941

Street Design
Desk: 817-392-7802, Fax: 817-392-8092

Street Design/Traffic Issues
Desk: 817-392-8055, Fax: 817-392-8092

Street Lights
Desk: 817-871-6596, Fax: 817-392-8092

Street Vacations
Desk: 817-392-8701, Fax: 817-392-8092

Traffic Impact Studies
Desk: 817-392-8005, Fax: 817-392-8092

Transportation Impact Fees
Desk: 817-392-7918

Water Department

Backflow Prevention and Grease Traps
Desk: 817-871-8495 & 817-871-8566
Desk: 817-871-8375 & 817-871-8305

Water and Sewer Mains and Taps
Desk: 817-392-8292, Fax: 817-392-8703

Development Issues
Desk: 817-392-8252, Fax: 817-392-8195

Development Issues with Water/Sewer Availability
Desk: 817-392-8480, Fax: 817-392-8195

Housing and Economic Development
Desk: 817-392-8187, Fax: 817-392-2437
Desk: 817-392-8003, Fax: 817-392-2437

Neighborhood Empowerment Zone

Desk: 817-392-7316, Fax: 817-392-7328

Housing Development Fund
Desk: 817-392-8091, Fax: 817-392-7328

Community Housing Development Organization (CHDO) Fund
Desk: 817-392-7331, Fax: 817-392-7328

Conveyance of Tax Foreclosure Properties to Eligible Non-Profit Organizations
Desk: 817-392-7319, Fax: 817-392-7328

Resources

The Counties

Denton County

County Planning Department
Desk: 940-565-8624, Fax: 940-565-5657

Environmental Health Department
Desk: 940-565-8685, Office Hours: 8-9 am & 1-2 pm

Johnson County

Health Department
Desk: 817-556-6380, Fax: 817-556-6391

Parker County
Health Department
Desk: 817-598-6175, Fax: 817-598-6177

Tarrant County

Health Department
Desk: 817-871-7511, Fax: 817-871-7283

Recorded Deeds and Plats
Desk: 817-884-1195

Transportation Services Department
Desk: 817-844-1250, Fax: 817-884-1178

Resources

The State

Alcoholic Beverage Commission - Applications for Sale of Alcohol

Desk: 817-451-9466

Department of Transportation (TxDOT)

Fort Worth District (Tarrant & Other Adjacent Counties)

Desk: 817-370-6532

Department of Transportation (TxDOT)
Desk: 817-370-6551

Resources

The Utilities

Electricity & Natural Gas

CoServ Electric (Formerly Denton County Electrical Co-Op)
Desk: 940-321-6644, Fax: 940-321-6640

Johnson County Electric Co-Op (JCEC)
Desk: 817-558-0010, Fax: 817-556-4039

TXU (Texas Utilities Electric Co. / Lone Star Gas)
Desk: 817-215-6688, Fax: 817-215-6184
Desk: 817-215-6254, Fax: 817-215-6316
Desk: 817-215-6218, Fax: 817-215-6660

Tri-County Electric Cooperative, Inc.
Desk: 817-431-1541, Metro: 817-379-4703, Fax: 817-431-9680

Telephone Service

AT&T
Desk: 404-810-4556, Fax: 404-810-4404

GTE
Desk: 972-717-5828, Fax: 972-717-5834

Millennium Telecom
Desk: 817-379-3007
Desk: 817-379-3007

Southwestern Bell Telephone, Inc.
Desk: 817-267-5752, Fax: 817-338-5106

Water Providers

Certificate of Convenience and Necessity (CCN)
For areas not served by the City of Fort Worth, please contact the Utility Section of the Texas Natural Resource Conservation Commission (TNRCC). To learn of the specific water provider (CCN) for the subject area, Call: 512-239-6960

Certificate of Convenience and Necessity (CCN)
For preliminary guidance, contact City of Fort Worth Water Department
Development Division, Call: 817-392-8428

IV. Attachments

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CONSTRUCTION SPECIFICATION

SECTION 32 31 00 – ORNAMENTAL WELDED FENCING SYSTEM

Montage II® - Heavy Industrial Weight

PART 1 - GENERAL
1.01 WORK INCLUDED
The contractor shall provide all labor, materials and appurtenances necessary for installation of the welded ornamental steel fence system defined herein at (specify project site).

1.02 RELATED WORK
Section __ __ __ - Earthwork
Section __ __ __ - Concrete

1.03 SYSTEM DESCRIPTION
The manufacturer shall supply a total fence system of Montage II ATF® Welded Ornamental Steel (Classic™) basis of design. The system shall include all components (i.e., panels, posts, gates and hardware) required. Must meet the performance specifications of system with "Buy American" required. Alternates must be also be LEED qualified and approval of alternates upon architects approval. 20 year manufacturers warranty by a manufacturing company in business at least 10 years. No field welding, riveted or retaining rod (internal fasteners) products allowed.

1.04 QUALITY ASSURANCE
The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES
ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process. ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus. ASTM D523 - Test Method for Specular Gloss. ASTM D714 - Test Method for Evaluating Degree of Blistering in Paint. ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus. ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments. ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates. ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact). ASTM D3359 - Test Method for Measuring Adhesion by Tape Test.

1.06 SUBMITTAL
The manufacturer's literature shall be submitted prior to installation.

1.07 PRODUCT HANDLING AND STORAGE
Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

PART 2 - MATERIALS
2.01 MANUFACTURER
The basis of design fence system shall conform to Montage II ATF® Welded Ornamental Steel, (Classic™) design, extended picket bottom rail treatment, 3-Rail style manufactured by Ameristar Fence Products, Inc., in Tulsa, Oklahoma. Please contact Chris Babb with questions at (918) 906-7242). Alternates must meet as indicated in 1.03 system description.

2.02 MATERIAL

A. Steel material for fence panels and posts shall conform to the requirements of ASTM A653/A653M, with a minimum yield strength of 45,000 psi (344 MPa) and a minimum zinc (hot-dip galvanized) coating weight of 0.90 oz/ft2 (276 g/m2), Coating Designation G-90.

B. Material for pickets shall be 1" square x 14 Ga. tubing. The rails shall be steel channel, 1.75" x 1. 75" x .105". Picket holes in the rail shall be spaced 4.715" o.c. For fence systems up to and including 6 feet tall, posts shall be a minimum of 2-1/2" square x 12 Ga. For fence systems 7 feet tall and 8' tall, posts shall be a minimum of 3" square x 12 Ga. Gate posts shall meet the minimum requirements of Table 1.

2.03 FABRICATION
A. Pickets, rails and posts shall be pre-cut to specified lengths. Rails shall be pre-punched to accept pickets.

B. Pickets shall be inserted into the pre-punched holes in the rails and shall be aligned to standard spacing using a specially calibrated alignment fixture. The aligned pickets and rails shall be joined at each picket-to-rail intersection by Ameristar's proprietary fusion welding process, thus completing the rigid panel assembly (Note: The process produces a virtually seamless, spatter-free good-neighbor appearance, equally attractive from either side of the panel).

C. The manufactured panels shall be subjected to an inline electrodeposition coating (E-Coat) process consisting of a multi-stage pretreatment/wash (with zinc phosphate), followed by a duplex application of an epoxy primer and an acrylic topcoat. The minimum cumulative coating thickness of epoxy and acrylic shall be 2 mils (0.058 mm). The color shall be (specify Black or Bronze). The coated panels shall be capable of meeting the performance requirements for each quality characteristic shown in Table 2.

D. Gates shall be fabricated using welded ornamental panel material and gate ends having a 1-3/4" square cross-sectional size. All rail and upright intersections shall be joined by shop welding. All picket and rail intersections shall also be joined by shop welding prior to coating.

PART 3 - EXECUTION
3.01 PREPARATION
All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 INSTALLATION
Fence posts shall be set according to Table 3, plus or minus ½". Fence panels shall be attached to posts with brackets supplied by the manufacturer. Gate posts shall be spaced according to the gate openings specified in the construction plans. The "Earthwork" and "Concrete" sections of this specification shall govern post base material requirements.

3.03 CLEANING
The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

Table 1 – Minimum Sizes for Montage II Posts

Fence Posts	Panel Height
2-1/2" x 12 Ga.	Up to & Including 6' Height
3" x 12 Ga.	Over 6' Up to & Including 8' Height

Gate Leaf	Gate Height		
	Up to & Including 4'	Over 4' Up to & Including 6'	Over 6' Up to & Including 8'
Up to 4'	2-1/2" x 12 Ga.	3" x 12 Ga.	3" x 12 Ga.
4'1" to 6'	3" x 12Ga.	4" x 11 Ga.	4" x 11 Ga.
6'1" to 8'	3" x 12 Ga.	4" x 11 Ga.	6" x 3/16"
8'1" to 10'	4" x 11 Ga.	6" x 3/16"	6" x 3/16"
10'1" to 12'	4" x 11 Ga.	6" x 3/16"	6" x 3/16"
12'1" to 14'	4" x 11 Ga.	6" x 3/16"	6" x 3/16"
14'1" to 16'	6" x 3/16"	6" x 3/16"	6" x 3/16"

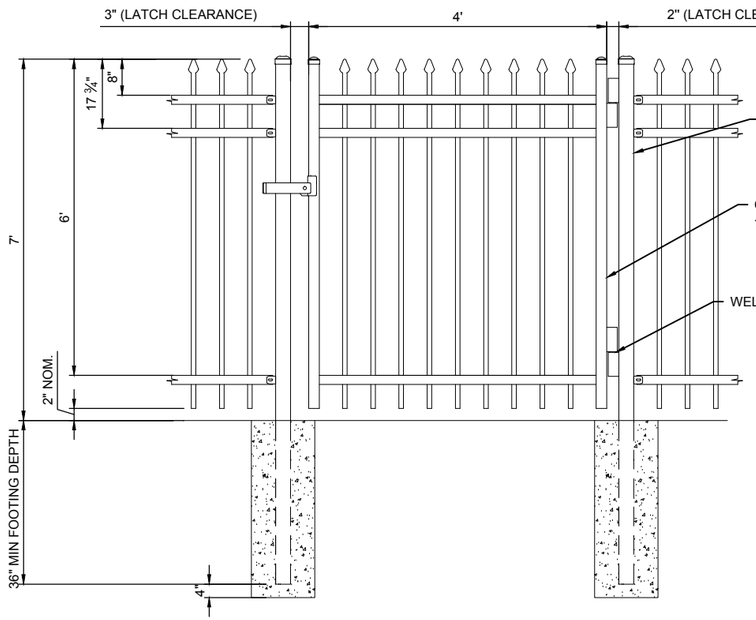
Table 2 – Coating Performance Requirements

Quality Characteristics	ASTM Test Method	Performance Requirements
Adhesion	D3359 – Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance	B117, D714 & D1654	Corrosion Resistance over 1,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance	D822 D2244, D523 (60˚ Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

Table 3 – Montage II – Post Spacing By Bracket Type

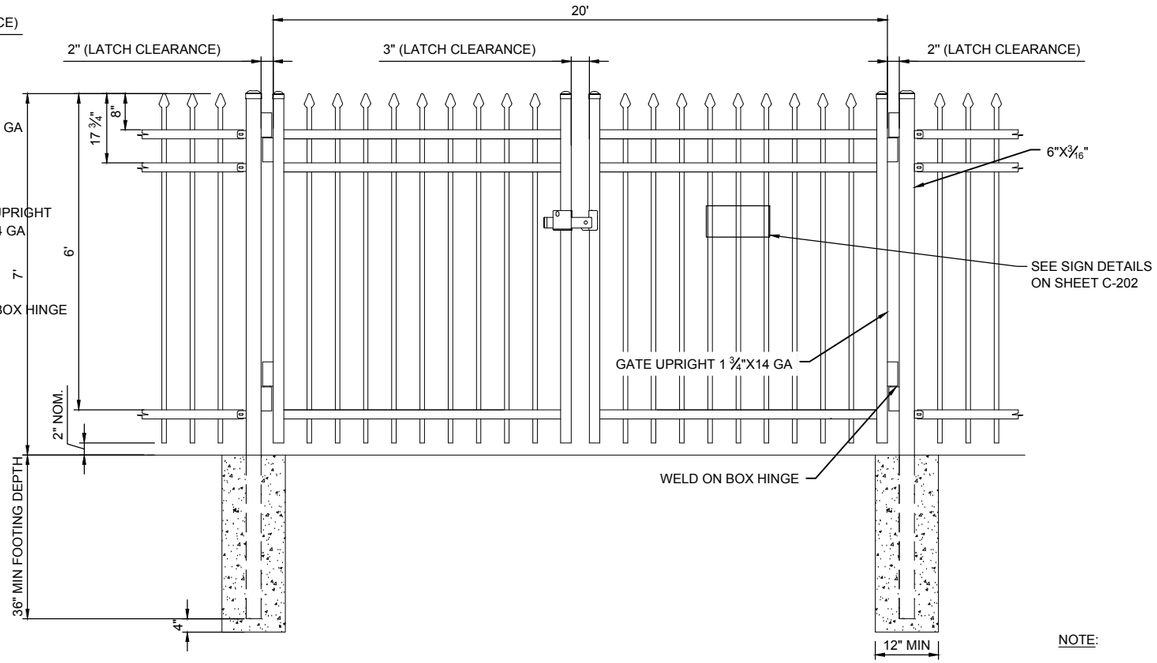
Span	For INVINCIBLE®	For CLASSIC, GENESIS, & MAJESTIC

	8’ Nominal (91-1/4” Rail)		8’ Nominal (92-5/8” Rail)					
Post Size	2-1/2”	3”	2-1/2”	3”	2-1/2”	3”	2-1/2”	3”
Bracket Type	Industrial Flat Mount (BB301)		Industrial Universal (BB302)	Industrial Universal (BB303)	Industrial Flat Mount (BB301)		Industrial Swivel (BB304)*	
Post Settings ± ½” O.C.	94-1/2”	95”	96”	96-1/2”	96”	96-1/2”	*96”	*96-1/2”
*Note: When using BB304 swivel brackets on either or both ends of a panel installation, care must be taken to ensure the spacing between post and adjoining pickets meets applicable codes. This will require trimming one or both ends of the panel.								



MANUAL ORNAMENTAL STEEL PEDESTRIAN GATE

1 / C-203 — SCALE: NONE

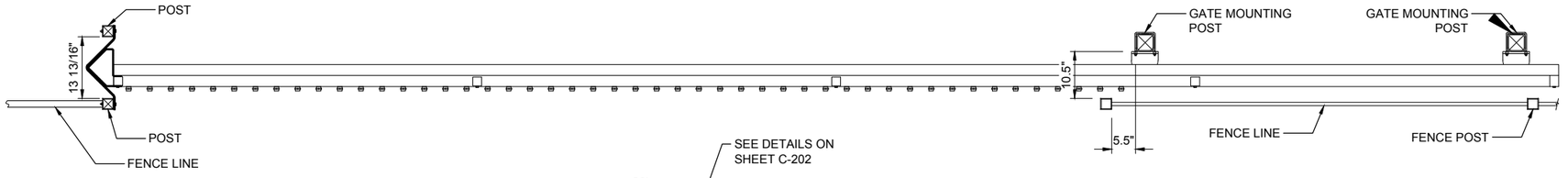


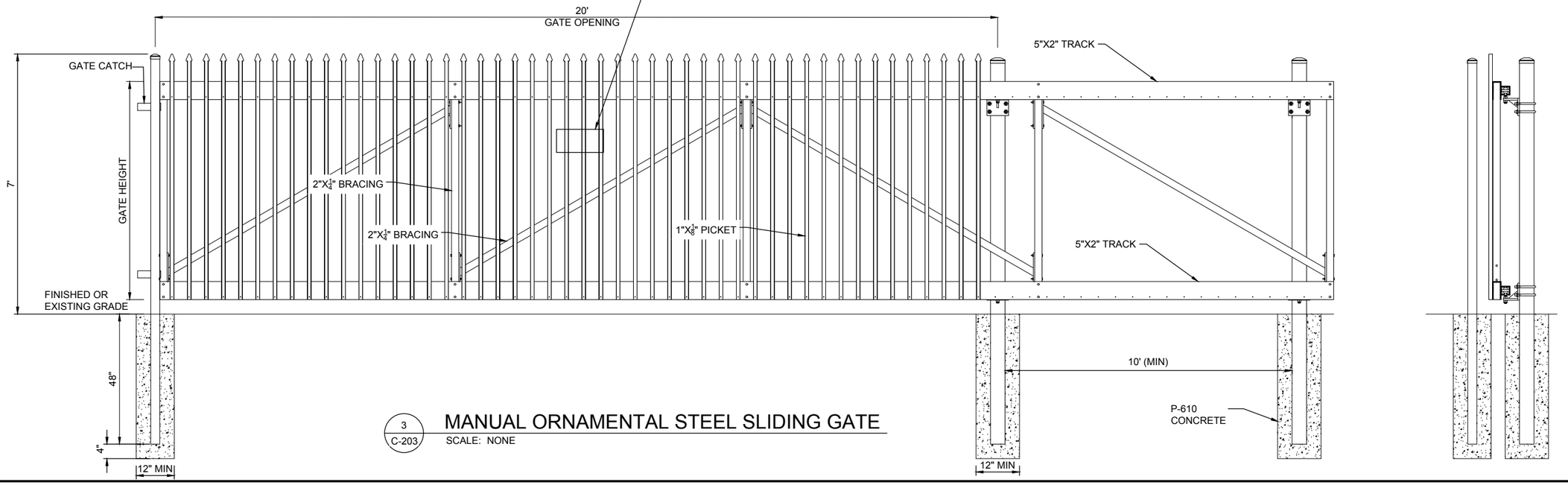
DOUBLE MANUAL ORNAMENTAL STEEL SWING GATE

2 / C-203 — SCALE: NONE

NOTE:

ROCK HAS BEEN ENCOUNTERED AT VARYING DEPTHS AND LOCATIONS OF THE AIRFIELD. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING FENCE, GATES, EROSION CONTROL STRIP, ELECTRICAL WORK, AND OTHER RELATED STRUCTURES AT NO EXTRA COST IF ROCK IS ENCOUNTERED. SEE FENCING SPECIFICATIONS (F-162 AND SS-242) FOR MORE DETAIL ON HOW TO CONSTRUCT FENCE WHEN ROCK IS ENCOUNTERED.





MANUAL ORNAMENTAL STEEL SLIDING GATE

3 / C-203 — SCALE: NONE

GARVER

STATE OF TEXAS
BRANDON C. BEVILLE
121604
LICENSED
PROFESSIONAL ENGINEER
DIGITALLY SIGNED ON
01/12/2017

REV.	DATE	DESCRIPTION	BY

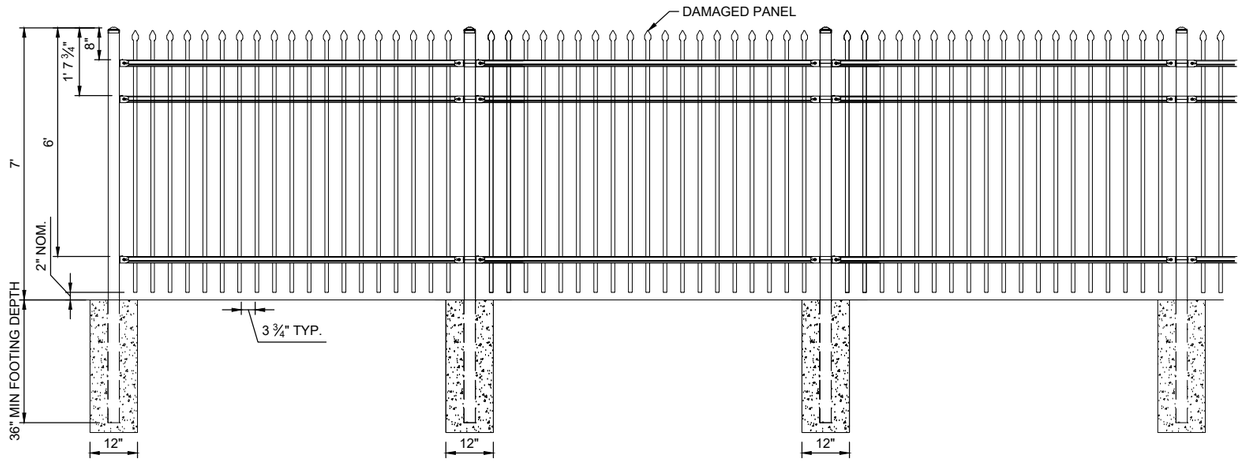
MEACHAM INTERNATIONAL AIRPORT
FORT WORTH, TEXAS
MEACHAM FRONTAGE FENCING

FENCE DETAILS III

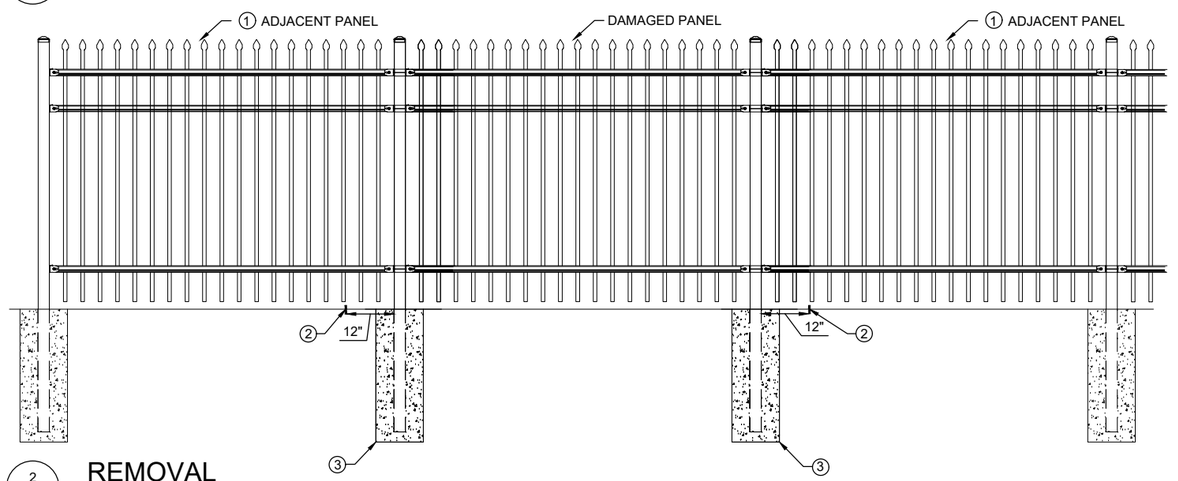
JOB NO.: 13081230
DATE: JAN., 2017
DESIGNED BY: BCB
DRAWN BY: KKR

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

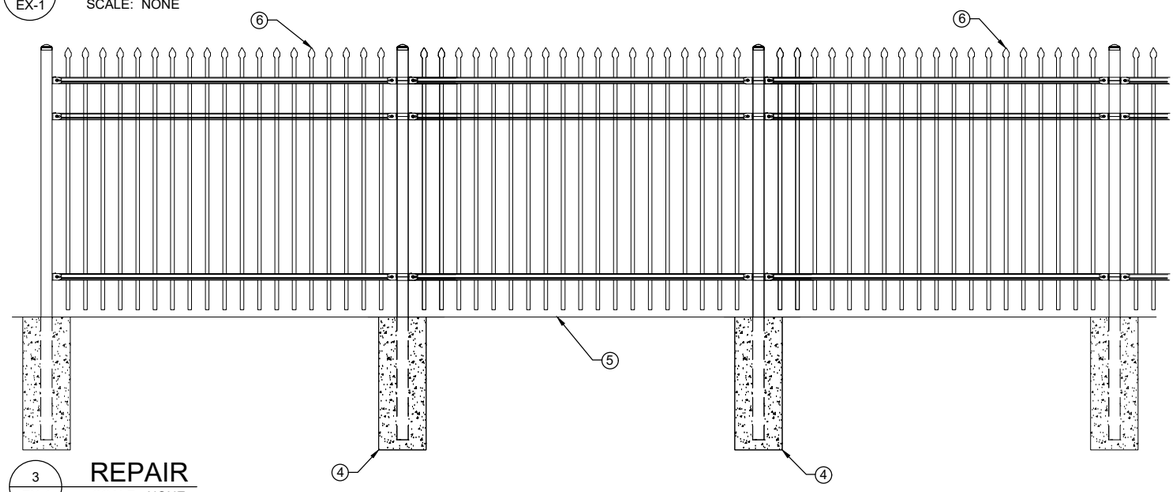
SHEET NUMBER 1



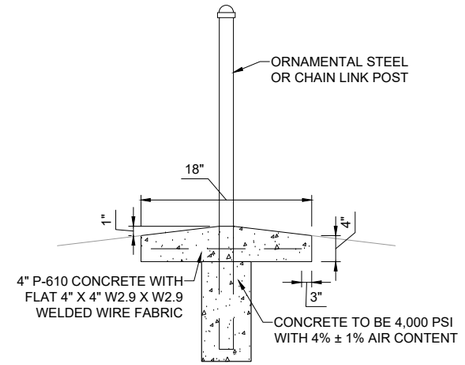
1 EX-1 **EXISTING DAMAGED 7-FOOT ORNAMENTAL FENCE**
SCALE: NONE



2 EX-1 **REMOVAL**
SCALE: NONE



3 EX-1 **REPAIR**
SCALE: NONE



4 EX-1 **EROSION CONTROL STRIP**
SCALE: NONE

NOTES:

1. REMOVE UNDAMAGED PANELS NEXT TO DAMAGED PANEL AND PROTECT.
2. SAWCUT AND REMOVE EXISTING EROSION CONTROL STRIP 1' PAST THE POST OF THE EXISTING PANEL.
3. REMOVE EXISTING FENCE POST FOUNDATIONS.
4. PLACE NEW FOUNDATION TO FILL HOLE LEFT BY REMOVAL OPERATIONS. (SEE DETAIL 4)
5. PLACE NEW EROSION CONTROL STRIP TO MATCH EXISTING ADJACENT CONTROL STRIP. (APPROX. 18" WIDE X 4" DEEP) (SEE DETAIL 4)
6. REPLACE ADJACENT UNDAMAGED PANELS AND NEW PANEL.

GARVER

REV.	DATE	DESCRIPTION	BY

MEACHAM INTERNATIONAL AIRPORT
FORT WORTH, TEXAS

FENCE REPAIR DETAIL

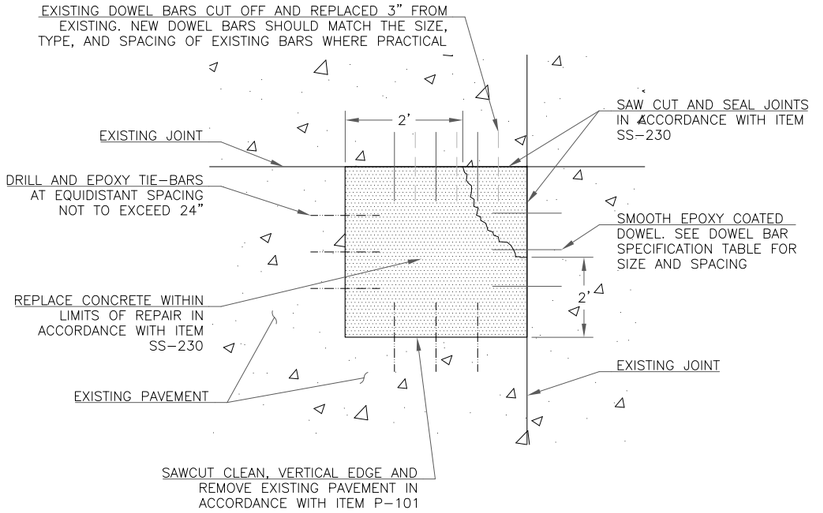
JOB NO.: 18081004
DATE: JUNE, 2018

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER
EX-1

SHEET NUMBER **1**

File: L:\2018\18081004 - FTW - On-Call Services\Drawings\Projects\Fence Repair\FTW-EX1-FENCEREPAIR.dwg Last Save: 6/27/2018 8:23 AM Last saved by: MSLang
Last plotted by: Lang, Madison S. Plot Style: AECmono.ctb Plot Scale: 1:2 Plot Date: 6/27/2018 8:23 AM Plotter used: DWG To PDF.pc3

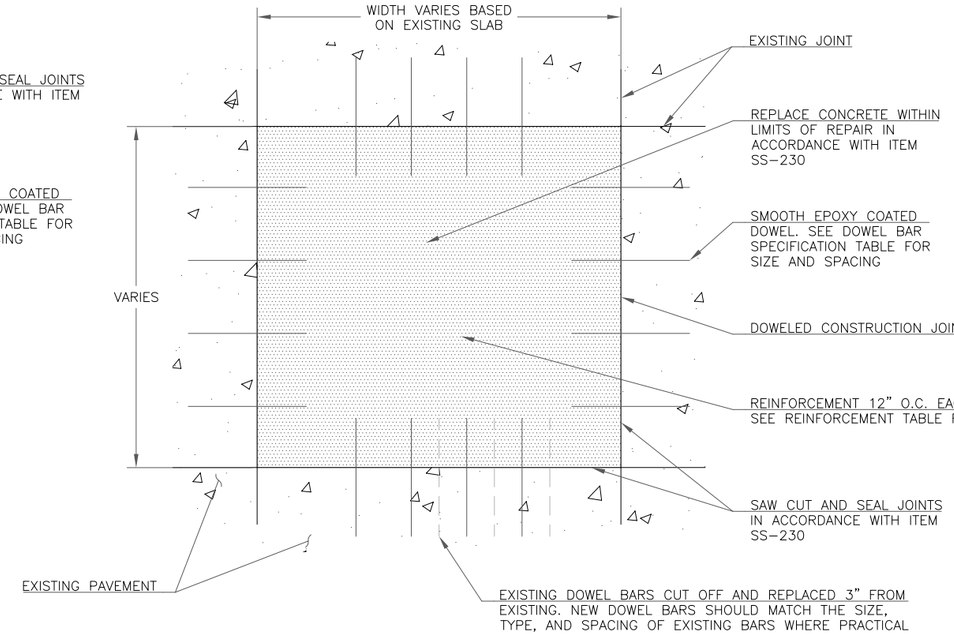


DETAIL A - CONCRETE CORNER REPLACEMENT DETAIL

SCALE: NONE

NOTES:

1. REMOVE PAVEMENT WITHIN LIMITS OF REPAIR
2. COMPACT AND RESTORE BASE MATERIAL
3. INSTALL NEW DOWEL BARS AND/OR TIE-BARS AS REQUIRED. TIE-BARS SHALL BE INSTALLED INTO REPAIR SLAB. DOWEL BARS SHALL BE INSTALLED INTO ADJACENT SLABS
4. FILL THE REPAIR AREA WITH CONCRETE AND FINISH SURFACE
5. AFTER CURING SAW ALL JOINTS AND SEAL PER DETAIL D



DETAIL B - FULL DEPTH CONCRETE SLAB REPLACEMENT DETAIL

SCALE: NONE

NOTES:

1. REMOVE PAVEMENT WITHIN LIMITS OF REPAIR
2. COMPACT AND RESTORE BASE MATERIAL
3. INSTALL NEW DOWEL BARS AS REQUIRED
4. FILL THE REPAIR AREA WITH CONCRETE, BEING SURE TO CONSOLIDATE THE CONCRETE ALONG THE LIMITS OF REPAIR. EXERCISE CAUTION WHEN WORKING ADJACENT TO EXISTING CONCRETE FACES, PARTICULARLY DURING CONSOLIDATION, AND WATCH FOR SEGREGATION OF THE CONCRETE. FINISH THE SURFACE TO MATCH EXISTING SURFACE WHEN PRACTICAL
5. AFTER THE CONCRETE CURES, SAW CUT ALL JOINTS AND SEAL PER DETAIL D

SYMBOLS

- SEALANT
- ROD BACK-UP MATERIAL CLOSED-CELL RESILIENT FOAM OR SPONGE RUBBER
- LIMITS OF REPAIR

DOWEL BAR SPECIFICATIONS

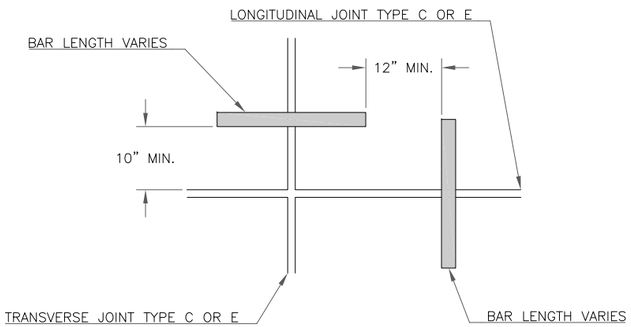
SLAB THICKNESS	DOWEL DIAMETER	DOWEL LENGTH	DOWEL SPACING
6" TO 7"	3/4"	18"	12"
8" TO 12"	1"	19"	12"
13" TO 16"	1 1/4"	20"	15"
17" TO 20"	1 1/2"	20"	18"
21" TO 24"	2"	24"	18"

REINFORCEMENT SPECIFICATIONS

SLAB THICKNESS	REBAR SIZE
≤ 9"	#3 REBAR
> 9"	#5 REBAR

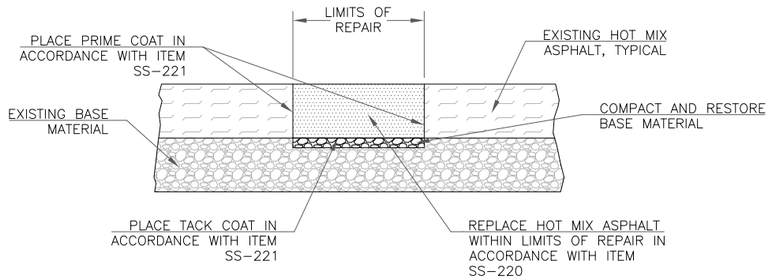
TIE-BAR REINFORCEMENT SPECIFICATIONS

SLAB THICKNESS	REBAR SIZE
≤ 12"	#4 TIE-BAR
> 12"	#5 TIE-BAR



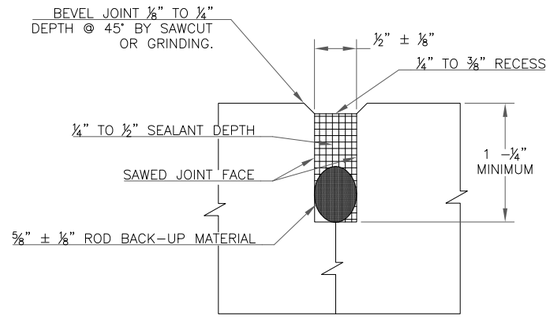
DETAIL E - DOWEL BARS AT SLAB CORNERS (PLAN VIEW)

SCALE: NONE



DETAIL C - HMA SURFACE REPLACEMENT DETAIL

SCALE: NONE



DETAIL D - CONSTRUCTION JOINTS

SCALE: NONE

GARVER

REGISTRATION NO. F-5713

REV.	DATE	DESCRIPTION	BY

MEACHAM INTERNATIONAL AIRPORT
FORT WORTH, TX

PAVEMENT DETAILS

PAVEMENT MAINTENANCE DETAILS

JOB NO.: 10081200
DATE: NOV, 2010
DESIGNED BY: BMN
DRAWN BY: BMN

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SHEET NUMBER

1

ITEM P-101 SURFACE PREPARATION

DESCRIPTION

101-1.1. This item shall consist of preparation of existing pavement surfaces for repair, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable details.

EQUIPMENT

101-2.1. All equipment shall be specified hereinafter or as approved by the Engineer. The equipment shall not cause damage to the pavement to remain in place.

CONSTRUCTION

101-3.1. REMOVAL OF EXISTING PAVEMENT

a. Concrete: The existing concrete to be removed shall be freed from the pavement to remain unless jackhammers are used for the complete removal.

When the pavement removal limit is located at a joint, this shall be accomplished by sawing through the complete depth of the slab one foot inside the perimeter of the final removal limits or outside the load transfer devices, whichever is greater. In this case, the limits of removal would be located on joints. The pavement between the perimeter of the pavement removal and the saw cut shall be removed with a jackhammer.

Where the perimeter of the removal limits is not located on the joint, the perimeter shall be saw cut 2 inches in depth or 1/4 the slab thickness, whichever is less. Again, the concrete shall be saw cut the full depth of the pavement 6 inches inside the removal limits. The pavement inside the saw cut or line shall be broken by methods suitable to the Contractor; however, if the material is to be wasted on the airport site, it shall be reduced to a maximum size designated by the airport owner.

The Contractor's removal operation shall not cause damage to cables, utility ducts, pipelines, or drainage structures under the pavement. Any damage shall be repaired by the Contractor at no expense to the airport owner.

b. Asphaltic Concrete: Asphaltic concrete pavement to be removed shall be cut to the full depth of the bituminous material around the perimeter of the area to be removed. The pavement shall be removed in such a manner that the joint for each layer of pavement replacement is offset one foot from the joint in the preceding layer. This does not apply if the removed pavement is to be replaced with concrete or soil. If the material is to be wasted on the airport site, it shall be broken to a maximum size as designated by the airport owner.

c. Disposal. All existing pavement removed shall be disposed of off-site. All hauling will be considered a necessary and incidental part of the work. Its costs shall be considered by the Contractor and included in the contract unit price for the pay items of work involved. No payment will be made separately or directly for hauling on any part of the work.

METHOD OF MEASUREMENT

101-4.1. MEASUREMENT.

a. Pavement Removal: Pavement removal shall not be measured for separate payment.

BASIS OF PAYMENT

101-5.1 PAYMENT. Payment for pavement removal shall not be paid for separately but shall be considered subsidiary to the item in which it is contained.

END OF ITEM P-101

ITEM P-620 RUNWAY AND TAXIWAY PAINTING

DESCRIPTION

620-1.1 This item shall consist of the painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications to replace markings removed by pavement maintenance operations.

MATERIALS

620-2.1 MATERIALS ACCEPTANCE. The Contractor shall furnish manufacturer's certified test reports for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. The reports can be used for material acceptance. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the Airoprt upon arrival of a shipment of materials to the site.

620-2.2 PAINT. Paint shall be **Waterborne** in accordance with the requirements of paragraph 620-2.2a. Paint shall be furnished in *White (37925), Yellow (33538 or 33655), Red (31136), and Black (37038)* in accordance with Federal Standard No 595.

a. WATERBORNE. Paint shall meet the requirements of Federal Specification TT-P-1952E, **Type I.**

620-2.3 REFLECTIVE MEDIA. Glass beads shall meet the requirements for **TT-B-1325D, Type I, gradation A, or TT-B-1325D, Type III**. Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

CONSTRUCTION METHODS

620-3.1 WEATHER LIMITATIONS. The painting shall be performed only when the surface is dry and when the surface temperature is at least 45°F (7°C) and rising and the pavement surface temperature is at least 5°F (2.7°C) above the dew point. Markings shall not be applied when the pavement temperature is greater than 120°F.

620-3.2 EQUIPMENT. Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless type marking machine suitable for application of traffic paint. It shall produce an even and uniform film thickness at the required coverage and shall apply markings of uniform cross sections and clear-cut edges without running or spattering and without over spray.

620-3.3 PREPARATION OF SURFACE. Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other foreign material that would reduce the bond between the paint and the pavement. The area to be painted shall be cleaned by sweeping and blowing or by other methods as required to remove all dirt, laitance, and loose materials without damage to the pavement surface. Use of any chemicals or impact abrasives during surface preparation shall be approved

in advance by the Engineer. **Paint shall not be applied to Portland cement concrete pavement until the areas to be painted are cleaned. Sandblasting or high-pressure water shall be used.**

620-3.4 LAYOUT OF MARKINGS. The proposed markings shall be laid out in advance of the paint application. Markings shall not be placed until locations are approved by the Airport. *Glass beads shall be applied as indicated in Section 620-3.5. Type III glass beads shall be used on all runway hold position markings and surface painted hold position signs. Type I glass beads shall be used on all other markings.*

620-3.5 APPLICATION. Paint shall be applied at locations and dimensions as required to replace painted removed from maintenance operations. Paint shall not be applied until the layout and condition of the surface has been approved by the Airport.

The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m) and marking dimensions and spacings shall be within the following tolerances:

Dimension and Spacing	Tolerance
36 inches (910 mm) or less	±1/2 inch (12 mm)
greater than 36 inches to 6 feet (910 mm to 1.85 m)	± 1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	± 2 inches (51 mm)
greater than 60 feet (18.3 m)	± 3 inches (76 mm)

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate(s) shown in Table 1. The addition of thinner will not be permitted. A period of 24 hours shall elapse between placement of a bituminous surface course, seal coat or concrete pavement and application of the paint.

TABLE 1. APPLICATION RATES FOR PAINT AND GLASS BEADS

Paint Type	Paint Square feet per gallon, ft^2/gal (Square meters per liter, m^2/l)	Glass Beads, Type I, Gradation A Pounds per gallon of paint—lb./gal. (Kilograms per liter of paint—kg/l)	Glass Beads, Type III Pounds per gallon of paint—lb./gal. (Kilograms per liter of paint—kg/l
Waterborne	**115 ft^2/gal. maximum (2.8 m^2/l)**	**7 lb./gal. minimum (0.85 kg/l)**	**10 lb./gal. minimum (1.2 kg/l)**

Glass beads shall be distributed upon the marked areas to receive glass beads immediately after application of the paint. A dispenser shall be furnished which is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate(s) shown in Table 1. Glass beads shall not be applied to black paint. *Glass beads shall be applied to all*

other final pavement marking applications at the application rate included in Table 1. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made.

All emptied containers shall be returned to the paint storage area for checking by the Airport. The containers shall not be removed from the airport or destroyed until authorized by the Airport.

620-3.6 PROTECTION AND CLEANUP. After application of the paint, all markings shall be protected from damage until the paint is dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings of paint. The Contractor shall remove from the site all debris, waste, loose or unadhered reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the Engineer. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and Federal environmental statutes and regulations.

620-3.7 REMOVAL OF EXISTING MARKINGS. If existing pavement markings require removal, they shall be removed without damaging the existing pavement. The markings shall be removed through the use of high-pressure water. For areas to be repainted, the existing painted surface shall be cleaned by high-pressure water blasting or sand blasting, as required, to remove all foreign material which would reduce the bond between the new paint and the old paint.

METHOD OF MEASUREMENT

620-4.1 The quantity of runway and taxiway markings to be paid for shall be the number of square feet (square meters) of painting performed in accordance with the specifications. *Reflective media will not be measured for payment but shall be considered subsidiary to the paint.*

620-4.2 Pavement marking removal will not be measured for separate payment, but shall be considered subsidiary to P-620.

BASIS OF PAYMENT

620-5.1 Payment shall be made at the respective contract price per square foot (square meter) for runway and taxiway painting**.** This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

620-5.2 Payment will not be made for paint removal, but shall be considered subsidiary to P-620.

Payment will be made under:

Item P-620-5.1	Pavement Marking Replacement - per square foot

TESTING REQUIREMENTS

ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C 146	Chemical Analysis of Glass Sand
ASTM C 371	Wire-Cloth Sieve Analysis of Nonplastic Ceramic Powders
ASTM D 92	Test Method for Flash and Fire Points by Cleveland Open Cup

ASTM D 711	No-Pick-Up Time of Traffic Paint
ASTM D 968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D 1213-54(1975)	Test Method for Crushing Resistance of Glass Spheres
ASTM D 1652	Test Method for Epoxy Content of Epoxy Resins
ASTM D 2074	Test Method for Total Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D 2240	Test Method for Rubber Products-Durometer Hardness
ASTM G 15453	Operating Light and Water-Exposure Apparatus (Fluorescent Light Apparatus UV-Condensation Type) for Exposure of Nonmetallic Materials.
Federal Test Method Standard No. 141D/GEN	Paint, Varnish, Lacquer and Related Materials; Methods of Inspection, Sampling and Testing

MATERIAL REQUIREMENTS

ASTM D 476	Specifications for Dry Pigmentary Titanium Dioxide Pigments Products
Code of Federal Regulations	40 CFR Part 60, Appendix A – Definition of Traverse Point Number and Location
Code of Federal Regulations	29 CFR Part 1910.1200 – Hazard Communications
FED SPEC TT-B-1325D	Beads (Glass Spheres) Retroreflective
AASHTO M 247	Glass Beads Used in Traffic Paints
FED SPEC TT-P-1952E	Paint, Traffic and Airfield Marking, Waterborne
Commercial Item Description (CID) A-A-2886B	Paint, Traffic, Solvent Based
FED STD 595	Colors used in Government Procurement

END OF ITEM P-620

ITEM SS-220 ASPHALT SURFACE COURSE

DESCRIPTION

220-1.1 This section covers construction of Dense-Graded Hot-Mix Asphalt in accordance with the Pavement Maintenance Details.

STANDARDS

220-2.1 SURFACE COURSE: Materials, equipment, and construction methods for Asphalt Surface Course shall be in accordance with Item 340 Dense-Graded Hot-Mix Asphalt (Method) of the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, except as modified or augmented herein.

CONSTRUCTION METHODS

220-3.1 Standard Specification Modifications and Augmentations:

1. 340.2.A. Aggregate: Reclaimed Asphalt Pavement (RAP shall not be used). A Surface Aggregate Classification (SAC) of D shall be used.

2. 340.2.A.2. RAP: Delete this paragraph.

3. 340.2.D. Asphalt Binder: The asphalt binder shall be PG 64-22.

4. 340.2.E. Tack Coat: Tack coat shall be as required in Item SS-221 Prime and Tack Coats.

5. 340.4 Construction: The Airport reserves the right to waive laboratory testing requirements for small asphalt placements if deemed unnecessary. In such case, the asphalt placed shall be tested on site using a nuclear gage.

METHOD OF MEASUREMENT

220-4.1 Dense-Graded Hot-Mix Asphalt (HMA) will be measured by the square yard of the thickness replaced. Measurements shall include only the actual amounts placed within repair area.

BASIS OF PAYMENT

220-5.1 Dense-Graded Hot-Mix Asphalt (HMA), acceptably completed, and measured as provided above, will be paid for at the contract unit prices per square yard bid for "HMA Surface Replacement", which prices shall be full compensation for furnishing, placing and compacting all materials; and for all equipment, tools, testing, labor, and incidentals necessary to complete the work.

Payment will be made under:

Item SS-220-5.1 HMA Surface Replacement – per square yard

END OF ITEM SS-220

ITEM SS-221 PRIME AND TACK COATS

DESCRIPTION

221-1.1 This item shall consist of a single application of bituminous material and blotter material if required, applied on the completed and approved base course, on the subgrade, and/or on the existing bituminous or concrete surface in accordance with these specifications.

STANDARDS

221-2.1 Work under this section shall be in accordance with the portions of Item 300 Asphalts, Oils and Emulsions and Item 310 Prime Coat of the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges that concern prime coats and tack coats, except as modified or augmented herein.

MATERIALS

221-3.1 Materials shall conform to the requirements provided under Item 300 Asphalts, Oils and Emulsions and Item 310 Prime Coat of the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges. A medium curing cutback asphalt or an asphalt penetrating prime will be used for prime coat and a rapid curing cut back or emulsified asphalt will be used for tack coat.

MEASUREMENT AND PAYMENT

221-4.1 Prime and tack coats will not be measured for separate payment but will be considered subsidiary to the HMA Surface Replacement.

END OF ITEM SS-221

ITEM SS-230 PORTLAND CEMENT CONCRETE PAVEMENT

DESCRIPTION

230-1.1 This section covers the construction of a pavement composed of Portland cement concrete, with or without reinforcement as specified, constructed on a prepared base course in accordance with these specifications and in conformance with the repair details.

STANDARDS

230-2.1 Materials, equipment, construction methods, and testing for Portland Cement Concrete Pavement shall be in accordance with Item 421 Hydraulic Cement Concrete of the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, except as modified or augmented herein. Joints shall be constructed in accordance with the repair details.

CONSTRUCTION METHODS

230-3.1 Mix Design shall be in accordance with 421 Hydraulic Cement Concrete of the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, except as modified herein. FAA mix design as specified in the typical P-501 FAA Specification may also be used. Design and Quality control of Portland Cement Concrete Pavement will consist of furnishing acceptable mix designs and performing all applicable quality control sampling and testing to the Airport. Proportioning shall provide for a minimum 28-day compressive strength of 5,000 psi. The concrete shall be Class P with an Aggregate Class of 3 as defined in Item 421 Hydraulic Cement Concrete.

230-3.2 STEEL REINFORCEMENT: Reinforcing shall consist of bar mats conforming to the requirements of ASTM A 184 or A 704. Alternately, reinforcing steel meeting ASTM A615 may be used if reinforcing steel is manually cut and tied.

Dowel bars shall be plain steel bars conforming to ASTM A 615 or ASTM A 966 and shall be free from burring or other deformation restricting slippage in the concrete. High strength dowel bars shall conform to ASTM A 714, Class 2, Type S, Grade I, II or III, Bare Finish. Before delivery to the construction site each dowel bar shall be painted with one coat of paint conforming to MIL-DTL-24441/20A.SSPC Paint 5 or SSPC Paint 25. Metal or plastic collars shall be full circular device supporting the dowel until the epoxy hardens.

Dowel bars or other load-transfer units of an approved type shall be placed across joints in the manner as shown on the repair details. They shall be of the dimensions and spacings as shown and held rigidly in the middle of the slab depth in the proper horizontal and vertical alignment by methods as described in the repair details. The portion of each dowel painted with rust preventative paint, as required under above and shown on the details to receive a debonding lubricant, shall be thoroughly coated with asphalt MC-70, or an approved lubricant, to prevent the concrete from bonding to that portion of the dowel. If free-sliding plastic-coated or epoxy-coated steel dowels are used, a lubrication bond breaker shall be used except when approved pullout tests indicate it is not necessary. Where butt-type joints with dowels are designated, the exposed end of the dowel shall be oiled.

230-3.3 Acceptance sampling and testing will be performed by the concrete supplier.

230-3.6 PAVEMENT STRENGTH: Compressive strength shall be as specified at 28 days using test specimens prepared in accordance with ASTM C 31 and tested in accordance with ASTM C 39. Concrete samples shall be furnished by the concrete supplier and shall be taken in the field to determine the consistency, air content, and compressive strength of the concrete. Concrete cylinders shall be made each day that the concrete is placed. Each group of cylinders shall be molded from the same batch of concrete and shall consist of a sufficient number of specimens to provide two compressive strength tests at each test age. Test ages will be 7 days and 28 days.

PCC pavement represented by cylinders not meeting the specified strength shall be removed and replaced.

230-3.7 JOINTS: Joints sealant material shall meet the requirements of ASTM D 5893, Type SL.

Each lot or batch of silicone sealing compound shall be delivered to the job site in the manufacturer's original sealed container. Each container shall be marked with the manufacturer's name, batch or lot number, shelf life, mixing instructions, and storage instructions and shall be accompanied by the manufacturer's certification stating that the compound meets the requirements of this specification.

Backer rod shall be a non-moisture absorbing, closed-cell, expanded polyethylene foam rod. The rod shall be compatible with the sealant and no bond or reaction shall occur between the rod and the sealant.

Joints shall be sealed as soon after completion of the curing period as feasible and before the pavement is opened to traffic, including construction equipment. The pavement temperature shall be above 50°F (10°C) before installation of silicone joint sealing material.

Immediately after saw cutting is complete the resulting cement slurry shall be completely removed from the joint by water washing (less than 100 psi pressure). After the joint is sufficiently dried, the joint shall be sandblasted. One pass along each reservoir face is required. After sandblasting the joint shall be blown out with compressed air. When the surfaces are clean and dry, and just prior to placement of the sealant, compressed air shall be used to blow out the joint and remove all residual dust. Air compressors shall be equipped with suitable traps capable of removing all free water and oil from the compressed air and shall be capable of furnishing air with a pressure greater than 90 psi.

Joints shall be inspected for proper width, depth, alignment, and preparation, and shall be approved by the Engineer before sealing is allowed. Sealant shall be installed in accordance with the following requirements:

A backer rod shall be installed as shown on the repair details, prior to placement of the joint sealer. The backing material shall be placed as shown on the plans and shall be non-adhesive to the concrete or the sealant material. The self-leveling sealant shall be applied in a continuous operation, by means of approved pressure equipment that will force the sealing material to the bottom of the joint and completely fill the joint without spilling the material on the surface of the pavement. Sealant which does not bond to the concrete surface of the joint walls, contains voids, or fails to set up to a tack-free condition will be replaced.

METHOD OF MEASUREMENT

230-4.1 Portland Cement Concrete Pavement and will be measured by the square yard. The width for measurement will be the width as constructed in accordance with the repair details.

BASIS OF PAYMENT

230-5.1 Work completed and accepted under this item and measured as provided above will be paid for at the contract unit prices bid per square yard for Portland cement concrete pavement accepted in-place, which price shall be full compensation for furnishing, transporting and placing materials, including steel bars for joints and all other joint materials; for reinforcement in designated slabs; for the preparation and processing of materials; for mixing, spreading, vibrating, finishing, and curing; for sawing, filling, and sealing joints; and for all labor, equipment, testing, tools and incidentals necessary to complete the work.

Payment will be made under:

Item SS-230-5.1	Concrete Pavement, Corner Replacement	- per square yard
Item SS-230-5.2	Concrete Pavement, Full Depth Concrete Slab Replacement	- per square yard

END OF ITEM SS-230

ITEM SS-280 ASPHALT CRACK REPAIR

DESCRIPTION

280-1.1 This item shall consist of the cleaning, application of herbicide and tack coat, and filling/sealing of cracks in the existing asphalt pavement. All cracks measuring 1/4" wide or wider shall be cleaned and filled/sealed according to this specification.

MATERIALS

280-2.1 Cracks measuring 1/4” to 1/2” wide shall be filled with a hot-poured joint sealant. Sealant shall conform to the standards set forth in ASTM D 6690.

In areas indicated on the plans, cracks measuring 1/2” wide or wider shall be filled with fine aggregate and sand asphalt.

280-2.2 Soil sterilants shall contain Bromacil or Prometone.. Application rate shall be in accordance with manufacturer’s recommendations.

280-2.3 Tack coat shall be as required in Item SS-221 Prime and Tack Coats.

CONSTRUCTION METHODS

280-3.1 General. Cracks in the existing pavement shall be cleaned and filled/sealed. Removal of grass, dirt, or other material existing in the cracks, including existing deteriorated sealant, shall be accomplished by the use of a hot-compressed air lance as described in this specification.

280-3.2 Crack Preparation. A high temperature compressed air lance shall be used at all times to blast out any vegetation, dirt, dampness and loose materials from the cracks. Existing crack sealant which is deteriorated shall be removed. The high velocity hot air shall be not less than 2,000 °F in temperature. The air lance shall operate in a no flame impingement condition and shall have a directional controlled velocity of 330-fps minimum and a combustion temperature at ignition of no less than 2,000 °F. If vegetation is considered a problem, a soil sterilant shall be applied.

280-3.3 Filler Application (Cracks ½” wide or wider). After cracks have been cleaned, have received soil sterilant, rejuvenator, and tack coat, the cracks shall be filled with a fine / sand asphalt mix as described in this specification. The asphalt mix shall be raked in the crack by hand in order to completely fill the entire crack. Once the crack is filled, excess asphalt mix shall be rounded up along the length of the crack and pinched into the crack using a small asphalt roller.

280-3.4 Sealant Application (Cracks ¼” to ½” wide). After cracks have been cleaned, have received soil sterilant, rejuvenator, and tack coat, the cracks shall be filled with a sealant as described in this specification and per the manufacturer’s recommendations. The cracks shall be filled so that the top of the filler is flush with the existing pavement. The “squeegee method” with a maximum width of two inches, shall be used to install the sealant. Cracks with excessive depths, shall be filled with a sand material to a depth no less than 1 inch from the top of the existing pavement surface. Sealant shall be applied to the sand material foundation.

280-3.5 Cure Time. In accordance with the manufacturer’s specifications, the Contractor shall allow the appropriate cure time for the sealant between placement of the sealant and the application of pavement

markings or seal coat.

METHOD OF MEASUREMENT

280-4.1 HMA Crack Repair (Type 1a) will be measured by the linear foot of cracks measuring 1/4" wide to 1/2" wide.

280-4.2 HMA Crack Repair (Type 1b) will be measured by the linear foot of cracks measuring 1/2" wide or wider.

BASIS OF PAYMENT

280-5.1 Work completed and accepted under this item for Type 1a cracks will be paid for at the contract unit price for Asphalt Crack Repair (Type 1a), which price shall be full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

280-5.2 Work completed and accepted under this item for Type 1b cracks will be paid for at the contract unit price for Asphalt Crack Repair (Type 1b), which price shall be full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

Item SS-280-5.1 HMA Crack Repair (Type 1a) - per linear foot

Item SS-280-5.2 HMA Crack Repair (Type 1b) - per linear foot

END OF ITEM SS-280

ITEM SS-281 CONCRETE CRACK AND JOINT REPAIR

DESCRIPTION

281-1.1 This item shall consist of the cleaning and sealing of cracks and joints in the existing concrete pavement. This item also consists of repairing pop outs in concrete pavement.

MATERIALS

281-2.1 Crack and joint sealing materials shall meet the requirements of ASTM D 5893, Type SL.

CONSTRUCTION METHODS

281-3.1 General. Cracks in the existing concrete pavement (1/4" minimum width) shall be cleaned and sealed. Joints requiring repair shall be cleaned and sealed. After cracks or joints have been cleaned, they shall be filled with a sealant as described in this specification.

281-3.2 Joint Preparation. All existing joint sealants will be removed by plowing or use of hand tools. Any remaining sealant/debris will be removed by use of wire brushes or other tools as necessary. In some instances, re-sawing the joints may be required. This is only recommended in areas where the existing joint faces cannot be thoroughly cleaned to satisfactorily promote the effectiveness and adherence of the new sealant. If re-sawing the joints is required, immediately after sawing, the resulting slurry will be completely removed from the joint and adjacent area by flushing with a jet of water, and by use of other tools as necessary. The joints will be allowed sufficient time to dry prior to re-sealing.

All joints shall be sealed the same day of the final cleaning. Cleaned joints left open overnight or joints which become contaminated before sealing shall be re-cleaned as specified under the second paragraph under crack preparation.

281-3.3 Crack Preparation. Removal of any vegetation, dirt, loose materials, and deteriorated sealant from the cracks shall be accomplished by routing. Cracks shall be routed so that the exposed face of the crack is enlarged to a width of 1/2" and to a depth as detailed in the sealant and backer rod manufacturer's recommendations.

When the cracks are thoroughly dry, and just prior to sealant placement, both vertical faces shall be cleaned by sandblasting with a nozzle attached to an aiming device that directs the sand blast at approximately a 45 degree angle and a maximum of two inches from the face of the crack. Each crack face shall be sandblasted individually. After sandblasting, compressed air shall be used to blow out the crack and remove all residual dust. Air compressors shall be equipped with suitable traps capable of removing all free water and oil from the compressed air and shall be capable of furnishing air with a pressure greater than 90 psi. The cracks shall be thoroughly dry before the sealant is placed.

All cracks shall be sealed the same day of the final sandblasting. Cleaned cracks left open overnight or cracks which become contaminated before sealing shall be re-cleaned as specified above.

281-3.4 Sealant Application. The pavement temperature shall be above 50°F at the time of installation of the poured sealing material. Cold applied crack sealing compound shall be applied uniformly solid from bottom to top and shall be filled without formation of entrapped air or voids. Backing material shall be nonadhesive to the concrete or the sealant material. A direct connecting pressure type extruding device with nozzles shaped for insertion into the crack or joint shall be provided. Any sealant spilled on the surface of the pavement shall be removed immediately. Sealant shall be applied in a manner that will completely fill the crack or joint with no gaps, entrapped air, voids, or

surface-only coverage. Care shall be taken to preclude excess sealant material from the adjacent pavement surface; excess material shall be removed before it cures. The sealant shall be installed according to the manufacturer's specifications. Sealant and backing material shall conform to the requirements detailed in SS-230 “Portland Cement Concrete Pavement”.

281-3.5 Backer Rod Material. The use of backer rod material in the bottom of the crack or joint to be filled is recommended to control the depth of the sealant, to achieve the desired shape factor, and to support the sealant against indentation and sag. Backer rod material should be compatible with the sealant, should not adhere to the sealant, should be compressible without extruding the sealant, and should recover to maintain contact with the crack or joint faces when the crack or joint is open. The backer rod will be 25 percent larger in diameter than the width of the reservoir.

281-3.6 Repair of Concrete Pop Outs. At locations shown on the airport layout map or as directed by the Airport, concrete fragments shall be removed and the pop out cavity shall be thoroughly cleaned with high-pressure water jets supplemented with compressed air to remove all loose material. Immediately before filling the cavity, a prime coat of epoxy resin, Type III, Grade I, shall be applied to the dry cleaned surface of all sides and bottom of the cavity. The prime coat shall be applied in a thin coating and scrubbed into the surface with a stiff-bristle brush. Pooling of epoxy resin shall be avoided. The cavity shall be filled with epoxy resin mortar or a Grade III epoxy resin. Mortar mixtures shall be proportioned as directed and shall be mixed, placed, consolidated, and cured as directed. Epoxy resin mortars shall be made with Type III, Grade 1, epoxy resin, using proportions and mixing and placing procedures as recommended by the manufacturer and approved by the Airport. Any repair material on the surrounding surfaces of the existing concrete shall be removed before it hardens.

METHOD OF MEASUREMENT

281-4.1 Concrete Crack or Joint Repair will be measured by the linear foot acceptably cleaned and sealed at the appropriate locations.

281-4.2 Joint sealing used in conjunction with concrete corner or full depth concrete slab replacement will not be measured for separate payment.

281-4.3 Work completed and accepted under this item and measured as provided above will be paid for at the contract unit prices bid per lump sum for Concrete Pop Out Repair accepted in-place, which price shall be full compensation for furnishing, transporting and placing materials, including the preparation of pop outs and processing of materials; for spreading, finishing, and curing; filling, pop outs; and for all labor, equipment, testing, tools and incidentals necessary to complete the work.

PAYMENT

281-5.1 Work completed and accepted under this item will be paid for at the contract unit price per linear foot for Concrete Crack Repair or Concrete Joint Repair, which price shall be full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the work.

281-5.2 Joint sealing used in conjunction with concrete corner or full depth concrete slab replacement will not be paid for separately, but shall be considered subsidiary to the item in which it is contained.

281-5.3 Work completed and accepted under this item will be paid for at the contract unit price per lump sum for Concrete Pop Out Repair, which price shall be full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the work

Payment will be made under:

Item SS-281-5.1	Concrete Crack Repair	- per linear foot
Item SS-281-5.2	Concrete Joint Repair	- per linear foot
Item SS-230-5.3	Concrete Pop Out Repair	- per lump sum

END OF ITEM SS-281

Federal Aviation Administration

FEDERAL AVIATION ADMINISTRATION

OE/AAA®

OBSTRUCTION EVALUATION / AIRPORT AIRSPACE ANALYSIS

DESK REFERENCE GUIDE

SUBJECT: Add a new Case On Airport

**You are required to have a registered e-filing account*

Federal Aviation Administration

If you've successfully registered, you can use your OE/AAA account to file your Notice of Proposed Construction or Alteration.

The OE/AAA electronic filing (e-file) system allows you to:

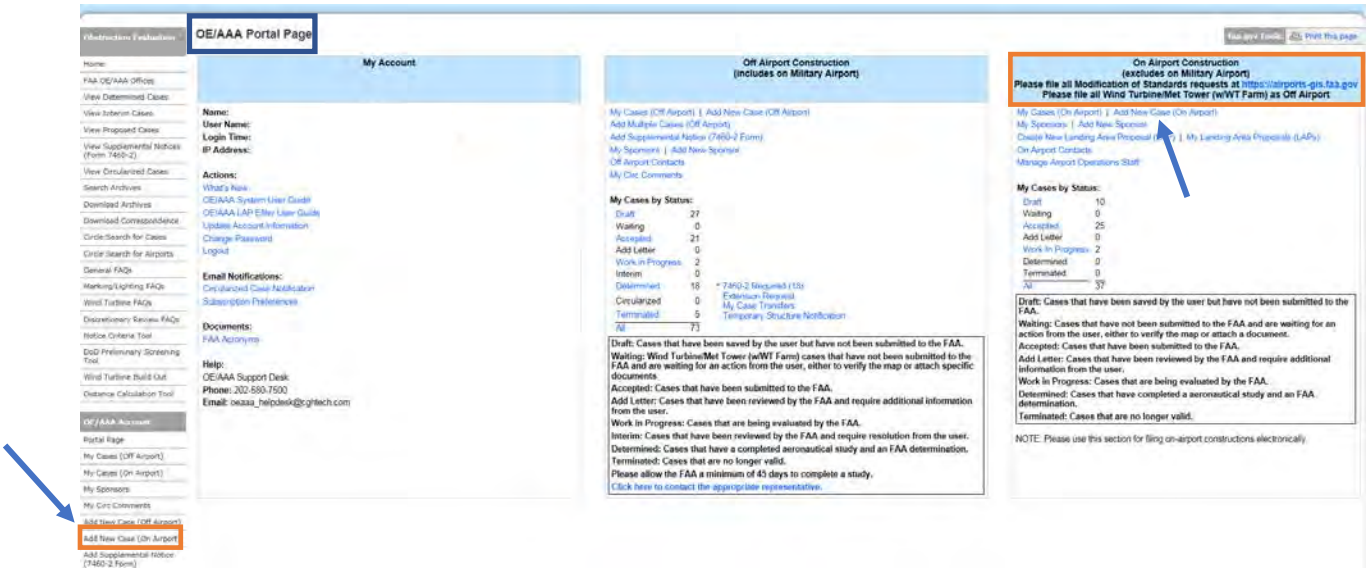
- Submit an FAA Form 7460-1 via an electronic data screen.
- Generate a map directly from your account to be submitted electronically with your filing.
- Track the status of your case as it moves through the study process.

From your OE/AAA Portal Page you have:

- Instant access to your determination, requests for additional information, etc... as they are completed by the FAA.
- The ability to attach surveys, and additional background information directly to your electronic case file(s).

Create a New Case

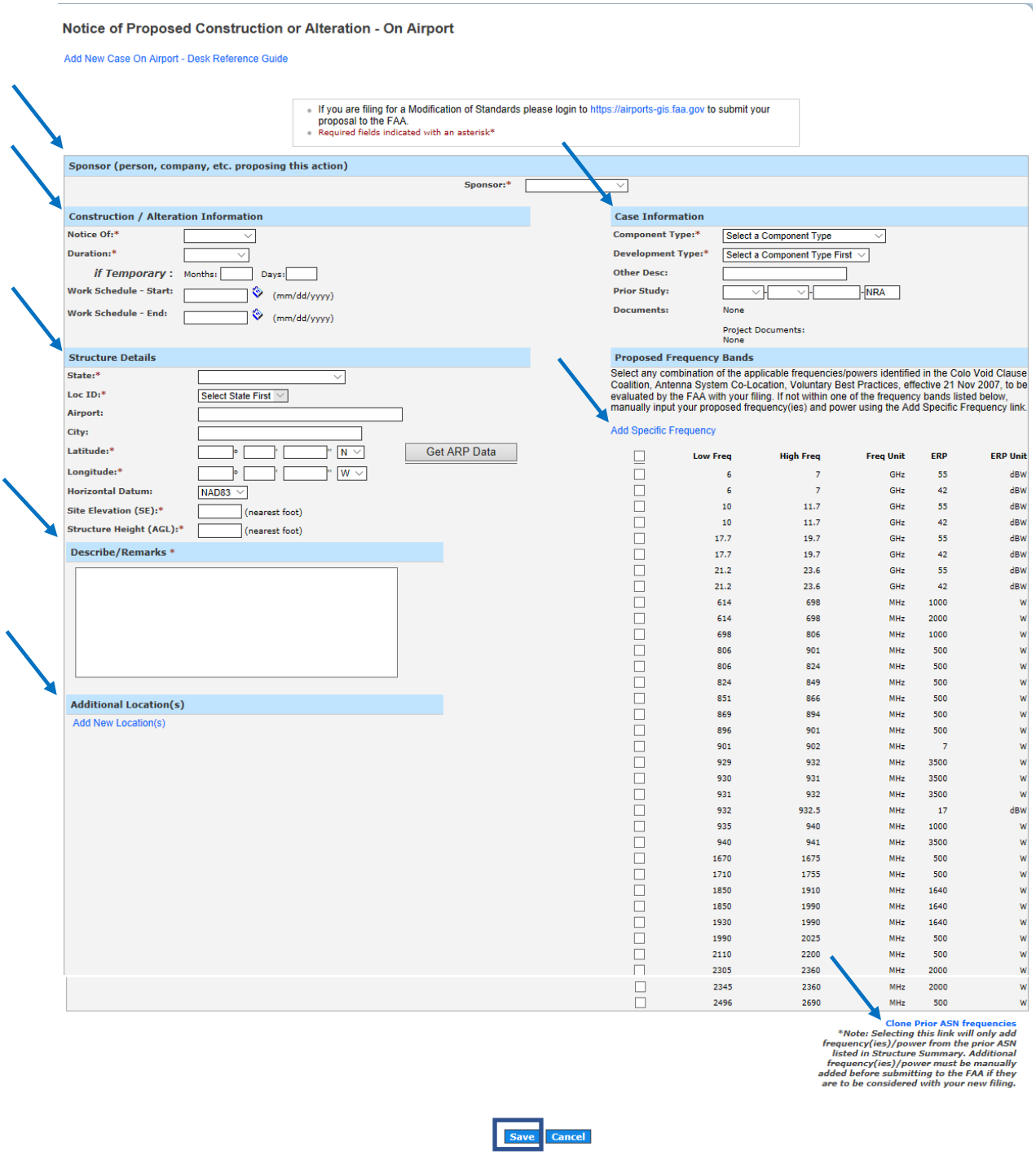
To create a new case, click the **Add New Case (On Airport)** link. This will bring up the *Notice of Proposed Construction or Alteration screen*. Complete each section per the instructions below.



Important: You must complete all required fields (indicated with an asterisk *) to successfully save your case. Missing data will result in a message at the top of your page identifying the required information.

Federal Aviation Administration

Add New Case On Airport



Note: You must complete all required fields (indicated with an asterisk

*) to successfully save your case. Missing data will result in a message at the top of your page identifying the required information.

A. *Sponsor: Select the Sponsor from the dropdown menu. This menu is populated from your My Sponsors list. The registered information will automatically display in your electronic public record as the Sponsor's Representative once the case has been completed and a valid FAA Determination is issued.

B. *Notice Of: Select the type of proposal. New Construction would be a structure that has not yet been built. Alteration is a change to an existing structure such as the addition of a side mounted antenna, a change to the marking and/or lighting, a change to power and/or frequency, or a change to the height. Existing would be a correction to the latitude and/or longitude, a correction to the existing height, or if filing for an existing

C. *Duration: If Permanent, so indicate. If Temporary, enter the estimated length of time the temporary structure will be up in Months/Days.

D. Work Schedule: (Not a Required Field) Using the calendar icons next to the fields select the date that construction is expected to start and the date that construction should be completed.

E. *Component Type: Select the type of component from the Component Type drop down list (e.g. Buildings, Hangar, etc...)

F. *Development Type: Select the type of development from the Development Type drop down list (e.g. Construction, Expansion, etc...)

G. Other Description: (Not a Required Field) Only available for certain Component/Development Type combinations, where the user may enter more description if necessary.

H. Prior Study: (Not a Required Field) If an FAA aeronautical study was previously conducted, enter the prior Aeronautical Study Number. Note: Micrositing submission of Wind Turbines/Met Towers previously filed that have moved no more than 500 feet from the structures original location and re-filed for aeronautical study require a prior ASN to validate the submission meets the criteria to be filed with the FAA as a micro-siting study.

I. * State: Select the state where the proposed structure will be located.

J. * Loc ID: Select the airport location identifier where the proposed structure will be located.

K. Airport: Entered by the system after LOC ID selection.

L. City: Entered by the system after LOC ID selection.

M. *Latitude/Longitude: Latitude and Longitude must be precise geographic coordinates entered in Degrees, Minutes, and seconds to the hundredth of a second (e.g. 25-47-4.75 N, 80-19-7.26 W).

NOTE: The “Get ARP Data” button can be used to auto-fill an Airport Reference Point (ARP) Degrees, Minutes, and seconds data; if used, filers must then manually update the data to the exact location of their proposed structure.

N. *Horizontal Datum: Select either NAD83 or NAD27. North American Datum is a reference from which latitude/longitude measurements are made.

O. *Site Elevation: Enter the site elevation above mean sea level expressed in whole feet rounded to the nearest foot (e.g. 12’ 3” should be entered as 12).

P. *Structure Height: Enter the total structure height above ground level in whole feet rounded to the next highest foot (e.g. 12’ 3” should be entered as 13). The total structure height shall include anything mounted on top of the structure such as antennas, lightning rods, obstruction lights, etc.

Q. *Describe/Remarks: Enter a brief description of the actual location of the site including the address or the relationship of the structure to roads, the airport, prominent terrain, existing structures, etc…, and a complete description that details the nature of the filing.

R. Additional Location(s): To successfully save additional location(s), the following required fields indicated with an asterisk (*) must be completed:

1. Latitude
2. Longitude
3. DATUM
4. Site Elevation (SE)
5. AGL height

S. Common Frequency Bands: (Not a Required Field) Check any that apply.

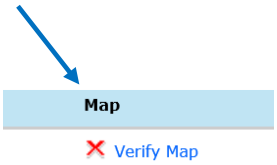
T. Specific Frequencies: (Not a Required Field) Any frequency band not listed in

Common Frequency Bands should be added here. Select the Add Specific Frequency link and enter the Low Frequency, High Frequency, Frequency Unit, Effective Radiated Power (ERP), and ERP Unit. Select [Save] or [Cancel] to be returned to the Case Data Entry page.

U. Clone Prior ASN frequencies – (Not a Required Field) The Prior ASN field must be filled before entering frequencies. This link is displayed after the Specific Frequency Bands section. This link is only available if the e-filer adds a Prior ASN that has frequencies included in the case. When selected the applicable Common Frequency Bands and/or Specific Frequencies from the prior ASN auto populate and are available for edit by the e-filer prior to saving the draft. Once the e-filer saves this data, it becomes part of the current filing and is transmitted to the FAA with the new ASN. The e-filer is permitted to add additional frequencies if necessary after cloned frequencies are pre-populated but duplicate entries are not allowed. Note: Selecting this link will only add frequency(ies)/power from the prior ASN listed in Structure Summary. Additional frequency(ies)/power must be manually added before submitting to the FAA if they are to be considered with your new filing.

When all required fields are complete, certify your entered information by checking the **[Certify]** checkbox, then select the **[Save]** button. This will save the case data as a **draft** and take you to the *Case Summary* page, but will ***NOT*** submit the form to the FAA.

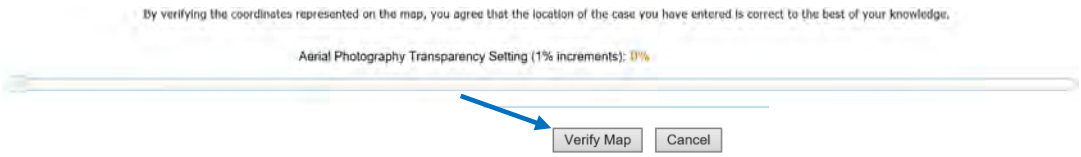
Verify the Map



The right side of the *Case Summary screen* includes a Map column and an Actions column. The Actions column contains the **Upload a PDF**, **Clone Location**, and **Delete Case** links. The Map column contains the **Verify Map** link. To map the case select the **Verify Map** link. This will bring you to the *OE/AAA Mapping Window*.

E-filers can view a topographical map and as desired, include aerial photo opacity up to 80 percent before verifying the location map used for submission to the FAA. To verify the map, check that the crosshairs line up with your structure location. There is also a measuring tool at the top of the map to assist with map verification.

Confirm Structure Location



If the crosshairs on the map match up with your proposed structure location, select the **[Verify Map]** button. This will save the verified map but will *NOT* submit the case to the FAA. It will open the *Case Summary* screen. Select the [Continue – Map/Verify Later] button to proceed without verifying the map.

Reject Structure Location

If the crosshairs on the map do not accurately depict the location of your structure, select the **[Cancel]** button. This will return you to the Project (case) *Summary screen*.

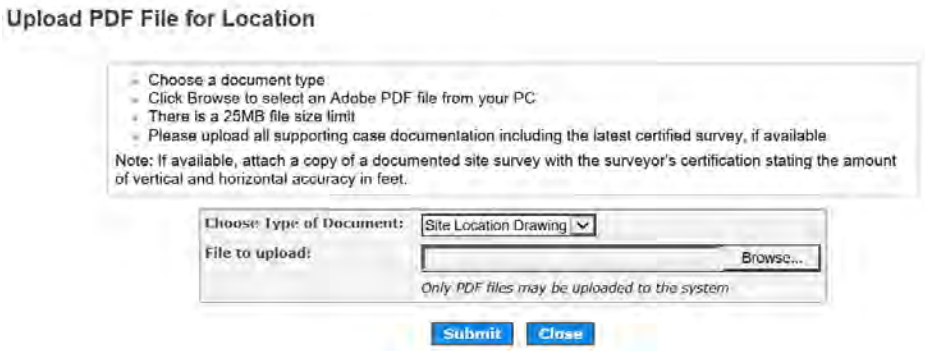
Select the **Airport Name** link to be returned to the *Case Data Entry (7460-1) screen*. Here you can revise your latitude/longitude coordinates. After you have made the appropriate revisions select the **[Save]** button. You will be required to repeat the map verification after you revise and re-save your case data.

Attach Documents to the Case

Before you submit a case to the FAA, you must also provide the FAA a document (site location drawing) of the proposal. You can do this by uploading a PDF document with your submission to the FAA.

Uploading a PDF Document

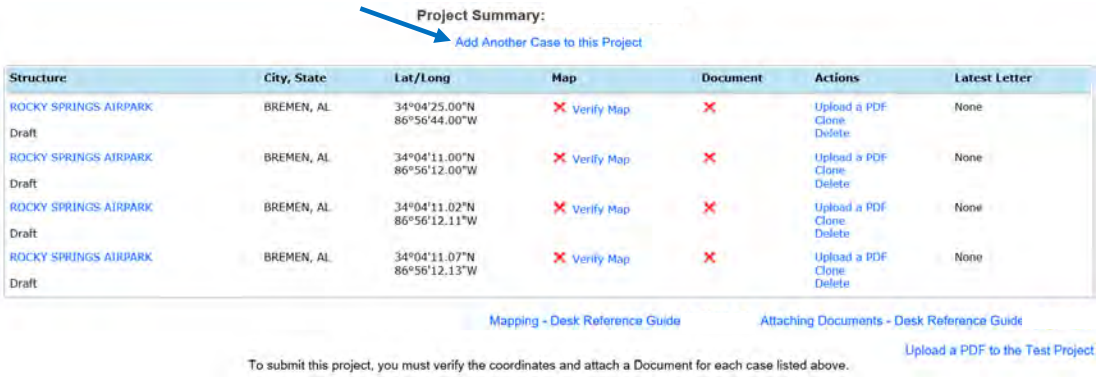
To upload a PDF document from your computer, select the **Upload a PDF** link. Choose the type of document from the Choose Type of Document dropdown and then **[Browse]** your computer to find the file. Once the file is located on the computer, **[Open]** it, then select the **[Submit]** button to continue.



You will receive confirmation when the document is successfully uploaded. The following message will display: Your file has been uploaded successfully to ASN: 2025-AXX-####-NRA. You may upload as many PDF documents as your case needs.

Projects

One or more cases can be grouped into a Project. For example, each of the four building corner points can be a Case of a building Project. Project makes it easier to file, evaluate, manage, and approve related cases.

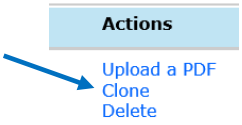


Add a Case

On the *Project Summary screen* you may select the **Add Another Case to this Project** link to add another case to this project. The cases entered this way will have the same project number.

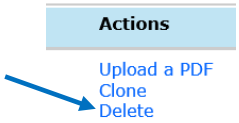
Federal Aviation Administration

Clone a Case



Another way to add a case to the project is to clone a new case from an existing case. E-filers can clone cases from the Project Summary screen of cases in their account regardless of the status (i.e. Draft/Submitted). To clone a case, click the **Clone** link. The cloning feature will copy most of the information over into a new *Case Data Entry* screen and link the cases together in a project. You may add as many cloned cases to your project as necessary. Once all of the maps for the project have been verified, the **[Submit]** button will appear on the *Project Summary* screen so that the entire project can be submitted to the FAA.

Delete a Case

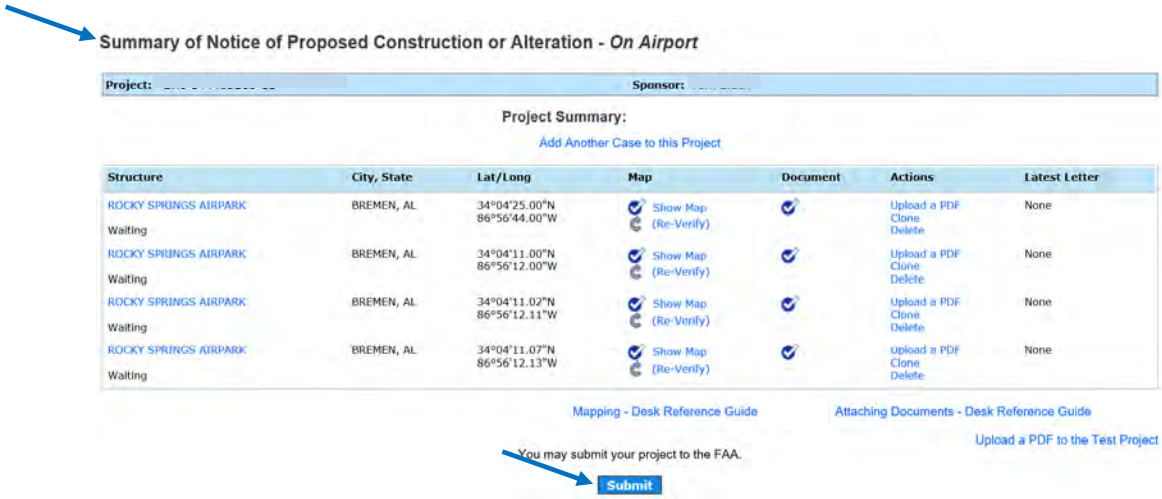


You may only delete cases in Draft status. To delete a single case or a case from a project, select the **Delete** link located under the Actions header on the Project Summary screen. This will display the *Confirm Case Deletion* screen. To continue with the delete, select the **[I Confirm]** button to execute the deletion.

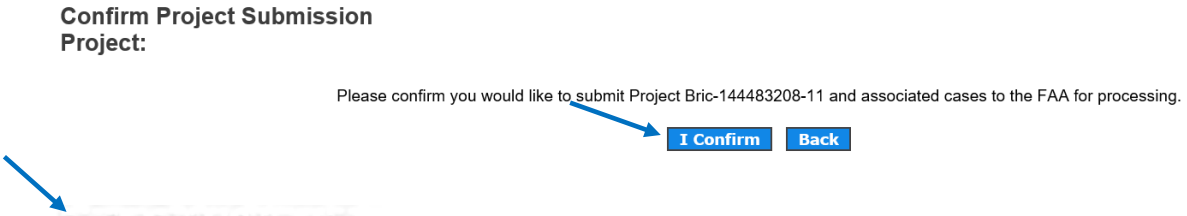
Submitting to the FAA

Note: Before submitting your case/project to the FAA, determine if you need to use the Clone or Delete features.

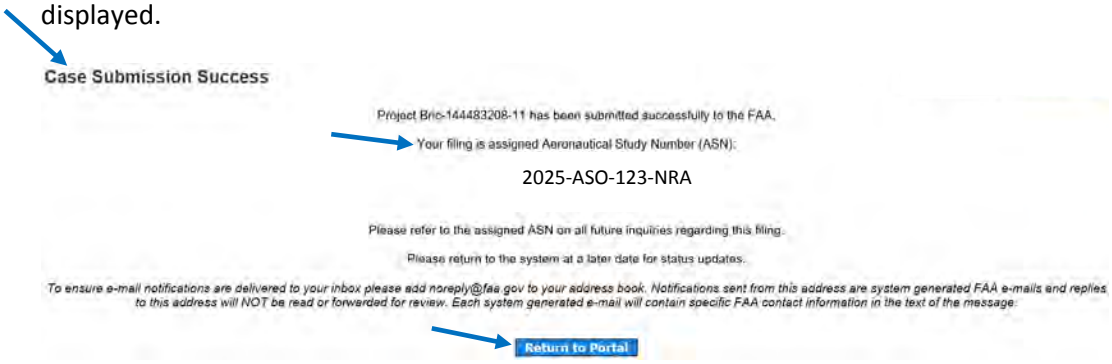
After the case data has been saved, the map verified, and a document uploaded, the **[Submit]** button will appear on the *Case Summary screen* to allow you to submit the case to the FAA. If you have completed inputting your case, select the **[Submit]** button to send it to the FAA. The *Confirm Case Submission screen* will be displayed.



Select the **[I Confirm]** button to continue. The case will be submitted to the FAA and the *Case Submission Success screen* will be displayed.



The Aeronautical Study number (ASN) assigned to your filed case(s) and other submission information is displayed.



Federal Aviation
Administration

Refer to the assigned ASN on all future inquiries regarding this filing.
Return to the system at a later date for status updates.

FORT WORTH

Pre-Development Conference Request

Applicant: _____ Total sq ft (bldg(s)): _____

Contact Number: _____ Height/ # of Floors: _____

Contact Email: _____ Site Acreage: _____

Project Name: _____ Subdivision: _____

Project Address: _____ Lot/Block: _____

Proposed Use: _____

Project Description (Provide detailed summary and/or questions related to your project):

Project Questionnaire:	Yes	No	Additional Comment(s)
Are you planning to subdivide or combine lots?	☐	☐	
Existing Building: Addition/Renovation/Demolition	☐	☐	
Do you need to establish new water/sanitary sewer service?	☐	☐	
Are any existing water/sewer services going to be eliminated?	☐	☐	
Do you plan on installing a commercial kitchen?	☐	☐	
Is a fire line/sprinkler needed for the proposed development?	☐	☐	

What size? ☐ 4" ☐ 6" ☐ 8" (choose one)

Please provide the following items with the application:

- Location map
- Site plan of your proposal with the following information:
  - ♦ Building footprints with dimensions
  - ♦ Surrounding streets, site parking and driveways
  - ♦ Supplemental surfaces (i.e. grass, concrete, etc.)
  - ♦ Dumpsters/compactors
  - ♦ Fences and screening
  - ♦ Signs

Due to the high number of requests, Pre-Development Conferences will not be scheduled until all items are provided.

Expedited Plan Review Services are available through the City of Fort Worth's X-Team. To learn about Expedited Plan Review Services provided by the City of Fort Worth, please visit http://fortworthtexas.gov/planninganddevelopment/permits/.

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