U. S. Department
of Transportation

**Federal Aviation
Administration**

Great Lakes Region
Illinois, Indiana, Michigan
Minnesota, North Dakota,
Ohio, South Dakota,
Wisconsin

2300 East Devon Avenue
Des Plaines, Illinois 60018

REGIONAL GUIDANCE LETTER—AIRPORTS DIVISION

NUMBER: RGL - 5070.1 (updated from PPM 5310-1)

DATE: June 28, 2011

SUBJECT: Preparation and Review of Airport Layout Plans (ALPs)

REFERENCES: FAA Advisory Circular 150/5070-6B Change 1 ("Airport Master Plans"), Appendix F ("Airport Layout Plan Drawing Set");
FAA Advisory Circular 150/5300-18B Field Data Collection and Geographic Information System Standards

BACKGROUND

All Federally obligated airports are required as part of the grant assurances to "keep up to date at all times an airport layout plan of the airport showing (1) boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto; (2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities; and (3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon. Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility, or efficiency of the airport." [1]

FAA Advisory Circular 150/5070-6B Change 1 ("Airport Master Plans") provides extensive guidance on the preparation of Airport Layout Plans (ALPs).

In order to maximize clarity, minimize costs and optimize the process of FAA review and approval of ALPs, the Great Lakes Region has developed this supplemental Regional Guidance Letter (RGL) to provide a standardized checklist to be used for all ALPs prepared in the Region.

[1] Airport Sponsor Assurance Sponsor Certification #25, Airport Revenue, part a.

Some state aeronautics agencies may have additional requirements for the ALP. Airport sponsors and consultants should contact the appropriate state aeronautics agency to determine if there are additional requirements.

RESPONSIBILITIES

Planning and Programming Branch (AGL-610)

AGL-610 is the Office of Primary Interest (OPI) for this RGL, and its responsibilities include coordinating any future updates or other modifications to this RGL.

Safety and Standards Branch (AGL-620)

AGL-620 holds the primary Regional Office responsibility for conformity with planning and design standards, compliance requirements, and airspace review.

Airports District Office (ADO) /or State Block Grant Program (SBGP)[2]

1. The ADO/SBGP is responsible for providing technical guidance and advice to the airport sponsors and consultants in the development of the ALP.

2. The ADO/SBGP is responsible for the airspace coordination process involving the ALP. Attachment C, "ALP Coordination Process," includes an example flow chart of the coordination process. AGL-620 also has a Standard Operating Procedure that addresses airspace coordination.

3. The ADO/SBGP is responsible for reviewing, commenting, and approving the ALP.

Airport Sponsors

1. Airport sponsors preparing ALPs with AIP or PFC funds must prepare the ALP in accordance with all applicable statutory and regulatory documents, including the most current versions of Advisory Circulars 150/5070-6B and 150/5325-4B. The latest Regional Guidance Letter on Airport GIS Data Collection (RGL 5300.4) shall be reviewed for implementation requirements of AC's 150/5300 – 16, -17, and -18. In the event of a conflict between this RGL and relevant regulations or Advisory Circulars, the regulation or Advisory Circular shall take precedence.

2. Sponsors must prepare, or require a qualified consultant to prepare, the ALP and all associated documentation including the "ALP Checklist" presented in Attachment B of this RGL.

[2] Depending on the State Block Grant Program Agreement between the ADO and State, the SBG may be responsible for these actions. The ADO normally provides review comments.

3. In order to minimize costs and optimize the FAA review process, sponsors are advised to review and quality check the completed "ALP Checklist" prior to submitting the ALP for FAA review.

Airport Sponsors or Consultants Preparing ALPs

1. Review Attachment A, "Guidelines on Preparing Airport Layout Plans," prior to starting work. Any questions should be addressed with the appropriate Airports District Office (ADO) contact.

2. Review and complete the "ALP Review Checklist" contained in Attachment B of this RGL prior to submitting the draft ALP to the FAA for review. A copy of the completed checklist should be submitted with the ALP.

3. Refer to all applicable regulations, orders and Advisory Circulars, whether or not referenced in this RGL.

4. An electronic copy of the approved ALP should be provided to the Airport Sponsor, the State, and the FAA Airports District Office. The electronic copy should be in a commonly used CADD software format and .PDF format.

TRANSITION TO ELECTRONIC-ALPS AND AIRPORTS GIS IMPLEMENTATION

In 2007, the FAA Airports Division introduced Advisory Circulars 150/5300-16, -17, and -18. These AC's provide updated specifications for the collection of airport survey data that conform to modern survey methodologies and widely accepted Geographic Information System (GIS) schema. An Airports GIS web portal was also created to provide a central location for input of airport data into the Airports GIS database and usage of airport data through a variety of modules.

The first Airports GIS module in development is the electronic Airport Layout Plan (eALP). The module will initially allow airports to assemble an eALP using data collected and uploaded onto the Airports GIS portal. It will eventually include the ability to fully process ALP's electronically by allowing for the coordination of reviews across the FAA lines of business (i.e. Airspace Review) and electronic approval signatures. A demonstration project in late 2009 established the systems ability to assemble an eALP from the Airports GIS data set. Pilot projects are currently underway to further demonstrate and field test the Airports GIS capabilities.

The Great Lakes Region has developed guidance (RGL 5300.4) on the implementation of Airports GIS Data Collection in our region. The purpose of this guidance is to ensure that Aeronautical Surveys, Airports GIS usage, and associated eALP's are implemented in an efficient and cost effective manner within the Great Lakes Region. Below are several items to keep in mind as we move to eALP's:

- Implementation – In anticipation of the National Airports GIS Implementation Schedule, AGL's policy is to limit the requirement for Airport Master Plans and

ALP's using ACs -16, -17, and -18 to Large and Medium Hub airports and pilot program airports through FY-2012 (Per RGL 5300.4, Section 4).

Regardless of airport type, the use of FAA Advisory Circular 150/5300-18 standards and data submittal requirements are required for:

- All Obstruction Surveys to develop a new or to change an existing instrument approach procedures
- Any project changing Safety-Critical Data as identified in table 4-1 of AC 150/5300-18. This generally includes data directly related to the development or modification of instrument approach procedures and data necessary to undertake threshold siting, Part 77 analyses, and other analyses. This includes, but is not limited to, runway ends, profiles, NAVAIDs, Obstacles, Airport Reference Point (ARP), and Airport Elevation. Table 4-2 of AC 150/5300-18 identifies Non Safety-Critical Data.

- Early Adoption - Though there will be a stepped approach to implementing Airports GIS, the Great Lakes Region encourages all of our airports to be pro-active in incorporating Airports GIS in their planning activities. In most cases it will be more cost efficient to include additional airport data collection of the whole airport when the safety-critical data survey is conducted. This would provide the airport with a solid base data layer and also assist in creating a more contiguous survey.

- Costs – The FAA understands that the limited experience in the implementation of Airports GIS will initially include higher costs for data creation and data development. Additional time will initially be needed to develop scopes of work and plans, and costs for imagery collection, ground surveying, and data processing will be larger than previously paid. However, the learning curve is quickly shrinking and many consulting firms have become more adept at developing scopes and plans. We expect that the quality and abundance of data gathered will offset this cost in future planning and construction analysis and design.

ATTACHMENTS

Attachment A: Guidelines on Preparing Airport Layout Plans
Attachment B. ALP Review Checklist
Attachment C: ALP Development and Review Process

Airports Division Manager
Great Lakes Region

Requirements:

The typical components of the ALP set are:

1. Narrative Report (normally includes forecasts and executive summary, level of detail shall be discussed with ADO prior to ALP project);
2. Title Sheet;
3. Airport Data Sheet;
4. Airport Layout Drawing (existing, future, etc);
5. Airport Airspace Drawing (14 CFR Part 77 Drawing);
6. Inner Portion of the Approach Surface Drawing;
7. Declared Distances Drawing (*Depiction of Declared Distances is required even if they are not in effect)
8. Terminal Area Drawing (Large scale plan view of area or areas where aprons, buildings, hangars, and parking lots are located);
9. Land Use Drawing;
10. Runway Departure Surface Drawing (if applicable);and
11. Airport Property Map or Airport Property Map/Exhibit A.

For larger and more complicated airports, additional components may include:

12. Plan/Profile Drawing of Runway;
13. Facilities Layout Plan (Simplified drawing of existing and future facilities only);
14. On-Airport Land Use Drawing;
15. Off-Airport Land Use Drawing;
16. ATCT Shadow Study;
17. Utility Drawing; and/or
18. Airport Access Plans.

A narrative report is required with the ALP. Most narratives will include forecasts and an executive summary. In some cases, the narrative may only need to be a description of small changes made to a simple straightforward ALP update. The level of detail shall be discussed with the ADO prior to starting the ALP update. Additionally, the ADO, Airport Sponsor, and consultant shall discuss the following:

- Determine whether a user survey and/or forecasts are needed;
- Existing and future approach category and design group;
- Existing and future critical aircraft;
- Sources of data;
- Existing and planned instrument approach types;
- Existing and future Building Restriction Line (BRL) setbacks;
- Existing and future declared distances (if applicable);

For smaller airports, some of the ALP sheets may be combined if practical and approved by the FAA.

The ALP drawing can be multiple sheets depending on the complexity of the airport and the proposed development. Separate sheets may be required to delineate major phases of complex development or airfield reconfiguration projects.

ALP clarity is of the utmost importance. Make sure that each sheet is readable and that all line types, widths and colors provide a clear depiction of development. The sheet size, scale, and minimum letter size should be consistent with FAA AC 150/5070-6B Change 1 (or most current version) or applicable state CADD standards.

Describe in detail any FAA design standard that is not currently met and the rational for request of a FAA modification to standards (MTS). If the ALP will require a MTS the sponsor will fill out all appropriate forms such as the FAA form "FAA GREAT LAKES REGION MODIFICATION OF AIRPORT DESIGN STANDARDS"

Changes made to Safety-Critical Data, as defined in Table 4-1 of AC 150/5300-18B must follow that AC's requirements for data submission. This will ensure that any changes made to airport data will be accurately reflected in the Airport Master Record (FAA Form 5010) and with the National Flight Data Center.

Regional Best Practices:

The following section of this Regional Guidance letter includes practices that should be incorporated into ALP projects in the Great Lakes Region. These practices have been compiled by Planners and Program Managers in the field who have direct responsibility for review and coordination of these types of documents. Following these practices will provide the FAA with the best possible document and may assist in expediting the review process.

The Narrative should include an executive summary of the findings/recommendations of the master planning effort. Each planned project should include:

- A short description of project (including what the deficiency is, what needs to be done to resolve deficiency in the timeframe stated, and why the proposed alternative meets this need).
- An implementation plan or Timeline (identify benchmarks or triggering points)
- Actions that will be conducted to verify the original planning assumptions or to proceed directly to project implementation
- A funding plan (tied into the airports Capital Improvement Plan)

The drawing set and support documentation should be submitted to the FAA and/or state aviation agencies for review and comment prior to submittal of the Draft ALP drawing set for airspace review. The ADO reviewer should review the Draft ALP to ensure that airport data is complete and accurate. In most cases, review comments should be addressed prior to the submittal of the Draft ALP drawing set for airspace review.

A complete property map update is recommended at the time of the ALP update. A new airport boundary survey should be completed (per AC 150/5300-18B) if there is a substantial change in airport boundaries or if existing boundary data is not determined to be traceable, usable, and accurate.

Existing Pavement strength or condition data should be incorporated in the narrative report as a drawing or diagram. This will assist in identifying any near- or long- term pavement projects to include in the capital improvement plan for the airport.

The RSA, OFA, and ROFZ extend the entire length of the runway, not just off the ends. The Taxiway Object Free Area and Taxiway Safety Area extend the entire length of the taxiway.

AC 150/5300-13, Appendix 2, Runway End Siting Requirements, may need to be shown only if it is more restrictive than the 14 CFR Part 77 surface or if the 14 CFR Part 77 surface has penetrations. This should be discussed with the appropriate ADO contact.

14 CFR Part 77 elevations for roads, railroads, interstates, etc should be shown to the closest approach surface intercept point relative to the runway. The elevation should be taken from the edge of the road, railroad, interstate, etc., rather than the middle. Always include the height of the movable object when showing clearances to the surface.

The Runway Protection Zone (Depict both the Central Portion of the RPZ and the Controlled Activity Area's), the 14 CFR Part 77 surfaces, and AC 150/5300-13, Appendix 2, Runway End Siting Requirements have different dimensions and functions. For further information on these critical considerations, please consult the current editions of the following:

- 14 CFR Part 77 ("Objects Affecting Navigable Airspace")
- AC 150/5300-13, Appendix 2 ("Runway End Siting Requirements")
- FAA Order 8260.3 ("United States Standard for Terminal Instrument Procedures")

All airports must depict Declared Distances on either the ALP drawing or a separate sheet, even if they are not being used at the airport.

Departure surface will be shown for runway's designated primarily for instrument departures. If the airport sponsor does not want a TERPs departure surface for a runway, the departure surface should be clearly marked "Not Applicable" on the Runway Data table.

The FAA's approval of an ALP is a Federal action subject to the National Environmental Policy Act (NEPA) and other environmental laws. The approving FAA official will issue a "conditional," "unconditional" or "mixed" approval of the ALP as prescribed by FAA Order 5050.4B, National Environmental Policy Act Implementing Instructions for Airport Actions.

When in doubt, always contact your appropriate ADO or SBG contact for clarification.

ATTACHMENT B. ALP REVIEW CHECKLIST

The following checklist is a supplement to the FAA AC 150/5070-6B Change 1, Appendix F, Airport Layout Plan Drawing Set and is to be used when completing and submitting an ALP in the Great Lakes Region for review and approval. All references are to AC 150/5070-6B Change 1, unless otherwise stated. Consultants and/or sponsors should indicate "Yes," "No" or "Not applicable (N/A)" for every item on the checklist. The FAA will then use the same checklist for review and verification.

The ALP Title Sheet must contain the following signed "ALP Review Statement":

> **On behalf of [insert consultant name], this Airport Layout Plan (ALP) was prepared for [insert Airport name] according to the applicable Advisory Circulars, the current version of the Great Lakes Region ALP Checklist, and accurately depicts the proposed use of airspace at the time of submittal. The ALP conforms with FAA design standards, except as noted.**

Airport Identification (to be completed by Sponsor or Consultant)

Airport _____

City and State _____ Three-Letter Code _____

Airport Owner _____

ALP Submission Information (to be completed by Sponsor or Consultant)

ALP Prepared by _____
Name of Consulting Firm

_____ _____
Name of Individual Date

_____
Telephone

_____
Email address

Internal QA/QC Review _____ _____
Name of Individual Date

Sponsor Review _____ _____
Name of Individual Date

_____
Title

FAA Review (to be completed by FAA)

_____ _____
Name of Individual Date

	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
I. Narrative Report					
A. Executive Summary – *A short summary of the findings/recommendations of the master planning effort or changes to the ALP. This should include a description of planned projects, an implementation plan/timeline, and identification of benchmarks or actions that will be conducted to either verify the original planning assumptions or proceed with project implementation.*					
1. Identify Projects along with description					
2. Create a Timeline for each Project					
3. Identify and List:					
a. Proposed Projects (e.g. Hangar development)					
b. Milestones/Triggering Events (e.g. 1. All hangars are full, 2. There is a waiting list long enough to fill a new development, 3. Hangars have reached their useful life, etc.)					
c. Action items/Next Steps (e.g. 1. Maintain log and gather data, 2. Discuss plan with ADO, 3. Put on ACIP, 4. Identify funding sources 5. Agreement from ADO that project should move forward to Environmental review.)					
d. Funding Plan					
B. Basic aeronautical forecasts (0-5, 6-10, 11-20 years):					
1. Total annual operations					
2. Annual itinerant operations by all aircraft					
3. Annual itinerant operations by current critical aircraft					
4. Annual itinerant operations by future critical aircraft					
5. Number of based aircraft					
6. Annual instrument approaches					
7. Number of enplanements					
8. State System Plan Forecasts/Critical Aircraft					
C. Alternatives/Proposed Development					
1. Explanation of proposed development items					
2. Discuss near-term and future Approach Procedure Requirements or affects (i.e. LPV, Circling, etc.)					
3. Navigational Aids or Other Equipment Needs (i.e. Approach Lights, Wind Cones, AWOS, etc.)					

	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
4. Is wind coverage adequate for existing and future runway layouts? Has wind data been updated?					
D. Rationale for unusual design features and/or modification to FAA Airport Design Standards requested and/or approved. This item must be either in the narrative report or clearly explained on the ALP.					
E. Obstruction Surfaces (14 CFR Part 77, Threshold Siting, Airports GIS surfaces)					
F. Development summary (including sketches, schedules, and cost estimates) for stages of construction for:					
1. 0-5 years					
2. 6-10 years					
3. 11-20 years					
G. Shadow study for towered airports (negative or positive statements are required)					
H. Letters of coordination with all levels of government, as needed.					
I. Are there any Wildlife Hazard Management Issues? (Reminder to review in narrative)					
J. Preliminary Identification of Environmental Features (Potential or Known Features only. Further Environmental Study will still need to be completed)					
a. Major airport drainage ditches					
b. Wetlands					
c. Flood Zones					
d. Historic or Cultural features					
e. Section 4(f) features					
f. Flora/Fauna					
g. Natural Resources					
h. Etc. (other features identified in Order 5050.4B)					
Remarks					
[insert any—field will automatically expand]					

Airport Layout Plan Drawings

Critical Design Aircraft or Family of Aircraft (Completed by Consultant in Checklist):

Existing:	**Make:**	**Model:**		**Annual Itinerant Operations:**	
Future:	**Make:**	**Model:**		**Annual Itinerant Operations:**	

Forecasted Year: _____

Airport Reference Code (ARC): _____

Approach Minimums:

Rwy End		**Minimum:**		**/ Rwy End**		**Minimum:**	
Rwy End		**Minimum:**		**/ Rwy End**		**Minimum:**	
Rwy End		**Minimum:**		**/ Rwy End**		**Minimum:**	
Rwy End		**Minimum:**		**/ Rwy End**		**Minimum:**	

Runways (Existing and Future):

RWY	Existing		Future		Departure Surface (Y / N/A)
	Length (ft)	Width (ft)	Length (ft)	Width ft)	

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
II. Title Sheet					
The scale of the Title Sheet should be developed to include the following:					
A. Title and revision blocks					
B. Airport owner approval block					
C. Date of ALP (date the airport sponsor/consultant signs the ALP)					
D. Index of sheets					
E. State Aeronautics Agency Approval Block					
F. State outline with county boundaries. County in which airport is located should be highlighted.					
G. Location map (general area)					
H. Vicinity map (general area showing specific airport location)					
I. Space for the FAA approval letter or stamp					
J. ALP Review Statement					
Remarks					
[insert any—field will automatically expand]					
III. Airport Data Sheet					
A. Title and Revision Blocks					
B. Wind Rose (all weather and IFR) with appropriate airport reference code, crosswind coverage, source of wind information and time period covered (for IFR runways applicable minimums should be included):					
1. 10.5, 13, 16, 20 knots windrose (based on appropriate airport reference code)					
2. Percentage of wind coverage/crosswind					
3. Source of data					
4. Age of data (last 10 consecutive years of data with most current data no older than 10 years)					
C. Airport Data Table					
1. Mean maximum temperature of hottest month					
2. Airport elevation (highest point of the landing areas, nearest 0.1 ft)					
3. Airport Navigational Aids, including ownership (NDB, TVOR, ASR, Beacon, etc.)					
4. Airport reference point coordinates, nearest second (existing, future if appropriate, and ultimate)					
5. Miscellaneous facilities (taxiway lighting, lighted wind cone(s), AWOS, etc.) [Including type/model and any facility critical areas]					
6. Identify the following for each runway and stage of development:					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
a. approach category					
b. design group					
c. tail height					
7. Critical Design Aircraft (existing & future)					
D. Runway Data Table					
1. Runway identification					
2. Approach Category and Design Group					
Visibility minimums (existing and future) [All changes to approach minimums must be confirmed through separate submission of the AGL "Request for Approach Procedure" Form prior to a request for a new, or amendment to an, approach procedure.]					
3. Pavement Strength & Material Type					
4. Effective Runway Gradient (%)					
5. Percent (%) Wind Coverage (each runway)					
6. Runway dimensions (length and width)					
7. Displaced Threshold					
8. Runway safety area dimensions (actual existing and design standard)					
9. Runway end coordinates (NAD83) (include displaced threshold coordinates, if applicable)					
10. Runway lighting type (LIRL, MIRL, HIRL)					
11. Runway Protection Zone (RPZ) Dimensions					
12. Runway marking type (visual, non-precision, precision)					
13. 14 CFR Part 77 approach category (50:1; 34:1; 20:1)					
14. Approach Type (precision, non-precision, visual)					
15. Type of Aeronautical Survey Required for Approach (Vertically Guided, not Vert. Guided)					
16. Runway Departure Surface (Yes or N/A)"					
17. Object Free Area and Precision Obstacle Free Zone Dimensions					
18. Visual and instrument NAVAIDs (Localizer, GS, PAPI, etc)					
19. Taxiway safety area dimensions					
20. Taxiway lighting					
21. Identify the vertical/horizontal datum					
E. Modification to Airport Design Standards Approval Table (if applicable, a separate written request, including justification, should accompany the modification to design standards)					
1. Approval Date/ Airspace Case No./ Standard to be Modified/ Description					
F. Object Penetrations Table					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
1. Obstacle Free Zone (OFZ) Object Penetrations (If none, state, "No OFZ Penetrations")					
2. Threshold Siting Surface (TSS) Object Penetrations (If none, state "No TSS Penetrations")					
G. Declared Distances Table (*Required even if Declared Distances are not in effect)					
1. TORA, TODA, LDA, ASDA					
Remarks					
[insert any—field will automatically expand]					

IV. Airport Layout Plan Drawing					
Two, or more, sheets may be necessary for clarity, existing and proposed. The reviewer should be able to differentiate between existing, future, and ultimate development. If clarity is an issue, some features of this drawing may be placed in tabular format. North should be pointed towards the top of the page or to the left. (scale 1"=200' to 1"=600') (Pg. 129-132)					
A. Title and Revision Blocks					
B. Layout of existing and proposed facilities and features:					
1. True and magnetic North with year of magnetic declination, include Epoch year					
2. Airport reference point – locate by symbol and elevation to the nearest 0.1 of a foot, Lat./Long. To nearest second (existing, future, and ultimate)					
3. Wind cones, segmented circle, beacon, AWOS, etc.					
4. Contours (showing only significant terrain differences)					
5. Elevations:					
a. Runway – existing, future, and ultimate ends (nearest 0.1 ft)					
b. Touchdown Zone Elevation (highest point in first 3,000 ft. of runway)					
c. Runway high/low points (existing and future)					
d. Label runway/runway intersection elevations					
e. Displaced Thresholds (if any)					
f. Roadways & Railroads (where they intersect Approach surfaces, the extended runway centerline, and at the most critical points)					
g. Structures					
6. Runway Details					
a. Dimensions – length and width (existing, future, and ultimate)					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
b. Orientation – true bearing to nearest 0.01 second (and runway numbers)					
c. End Coordinates – existing, future, and ultimate degrees, minutes, seconds (to the nearest 0.01 second)					
d. Runway Safety Areas – actual, existing, future, and ultimate (including dimensions)					
e. Object Free Areas (OFA)					
f. Precision Obstacle Free Zone (POFZ)					
g. Obstacle Free Zone (OFZ)					
h. Clearways and Stopways					
i. Runway Protection Zone (RPZ)					
i. Dimensions (existing, future, and ultimate)					
j. 14 CFR Part 77 Approach Surfaces					
k. FAA AC 150/5300-13, Appendix 2 Runway End Siting Requirements, if applicable (see Attachment A guidelines)					
i. Approach Surface Slope and Type (existing & future)					
l. NAVAIDS – PAPI, ILS, ALS, MALSR, REIL, etc. (plus NAVAID critical area's)					
m. Marking – thresholds, hold lines offsets, etc.					
n. Displaced threshold coordinates and elevation					
o. Runway separation distances					
7. Taxiway Details (Taxiway Safety Area and Object Free Area extend the entire length of the taxiway):					
a. Dimensions – width (existing & ultimate)					
b. Taxiway Object Free Area					
c. Hold Position signage/marking					
d. Taxiway Centerline Separation from:					
i. Runway centerline					
ii. Parallel taxiway					
iii. Aircraft parking					
iv. Objects					
8. Fences (identify height)					
9. Aprons					
a. Dimensions					
b. Identify aircraft tie-down layout					
c. Identify Special Use Area's. (i.e. Deicing or Aerial Applications on or near an apron)					
10. Roads (labels)					
11. Legend					
12. Building table (including building elevations)					
13. Items to be identified with distinct line types					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
a. ILS Critical Areas (GS & Localizer)					
b. Building Restriction Lines (reference FAA AC 150/5300-13, paragraph 210; identify assumptions)					
c. Runway Visibility Zone					
d. Airport Property Lines and Easements (existing, future, and ultimate)					
14. Survey Documentation					
a. Survey Monuments (PACS/SACS, see AC 150/5300-16)					
b. Offsets, stations, etc.					
15. Any ATCT line of sight/shadow study areas (use separate sheet if necessary)					
16. General Aviation development area (i.e., fuel facilities, FBO, hangars, etc) – greater detail can be shown on the terminal area drawing					
17. Facilities and movement areas that are to be phased out, if any, are described					
Remarks					
[insert any—field will automatically expand]					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
V. Airport Airspace Drawing					
(Part 77) Scale 1" = 2000' plan view, 1" = 1000' approach profiles, 1"=100' (vertical) for approach profiles (Pg. 132)					
A. Title and Revision Block					
B. Plan view (based on ultimate runway lengths)					
1. USGS Quad Sheet for base map					
2. Runway end numbers					
3. Part 77 Surfaces (Horizontal, Conical, Transitional, etc). Including elevations at the point where surfaces change.					
4. 50' elevation contours on sloping surfaces (NAVD88)					
5. Top elevations of penetrating objects (refer to the inner portion of the approach surface drawing, pg. 133-134)					
6. Note specifying height restriction (ordinances/statutes, pg. 133)					
C. Profile view (optional)					
1. Airport Elevation					
2. Composite Ground Profile along extended Runway Centerline					
3. Significant objects (bluffs, rivers, roads, schools, towers, etc.) and elevations					
4. Existing, future, and ultimate runway ends and approach slopes					
D. Obstruction Data Tables (identify obstacles not depicted on the Inner Portion of the Approach Surface Drawing)					
1. Object identification number					
2. Description					
3. Date of Obstruction Survey					
4. Ground Surface Elevation					
5. Object Elevation					
6. Amount of surface penetration					
7. Proposed or existing disposition of the obstruction					
Remarks					
[insert any—field will automatically expand]					

Airport Layout Plan Drawings					
	Sponsor/Consultant				FAA
	Yes	No	N/A		
VI. Inner Portion of the Approach Surface Drawing					
Scale 1"=200' Horizontal, 1"=20' Vertical (Pg.133) Two sheets may be necessary for clarity. Typically, the plan view is on the top half of the drawing and the profile view is on the bottom half. (views should be drawn from the runway threshold to a point on the approach slope 100 ft above the runway threshold elevation, at a minimum, or the limits of the RPZ, whichever is further).					
A. Title and Revision Block					
B. Plan View (existing, future, and ultimate)					
1. Inner portion of approach surface					
2. Aerial photo for base map when available					
3. Objects (identified by numbers)					
4. Property line within approaches					
5. Road & railroad elevations, plus movable object heights					
6. Approach Surface clearance over Roads and Railroads at the most critical points, the Centerline and Edge of the surface.					
7. Physical end of runway, end number, elevation (NAVD88)					
8. Airport Design Surfaces					
a. Runway Safety Area					
b. Runway Object Free Area					
c. Runway Obstacle Free Zone					
d. Runway Protection Zone					
e. Precision Obstacle Free Zone					
9. Ground contours					
C. Profile view					
1. Existing and proposed runway centerline ground profile (list elevations at runway ends & at all points of grade changes)					
2. Future development from plan view					
3. Part 77 Approach/transition surface					
4. AC 150/5300-13, Appendix 2 Runway End Siting Requirements, if applicable					
5. Terrain in approach area (fences, streams, etc.)					
6. Objects – identify the controlling object (same numbers as plan view)					
7. Touchdown zone elevation (highest point in first 3,000 ft. of runway)					
8. Cross section of road & railroad					
9. Existing and proposed property and easement lines					
D. Obstruction tables for each approach surface (surface should be identified)					
1. Object identification number					
2. Description					
3. Date of Obstruction Survey and Survey					

Airport Layout Plan Drawings					
	Sponsor/Consultant				FAA
	Yes	No	N/A		
Accuracy					
4. Allowable Part 77 elevation					
5. Amount of surface penetration					
6. Proposed disposition of Part 77 obstruction					
7. Triggering Event (i.e., Runway extension) – Timeframe/expected date for removal					
8. Allowable Appendix 2 surface elevation (if applicable)					
9. Amount of Appendix 2 surface penetration (if applicable)					
10 Proposed disposition of Appendix 2 surface obstruction (if applicable)					
11. 150/5300-13, Appendix 2 Surfaces (15:1, 20:1, 34:1, 40:1)					
Remarks					
[insert any—field will automatically expand]					

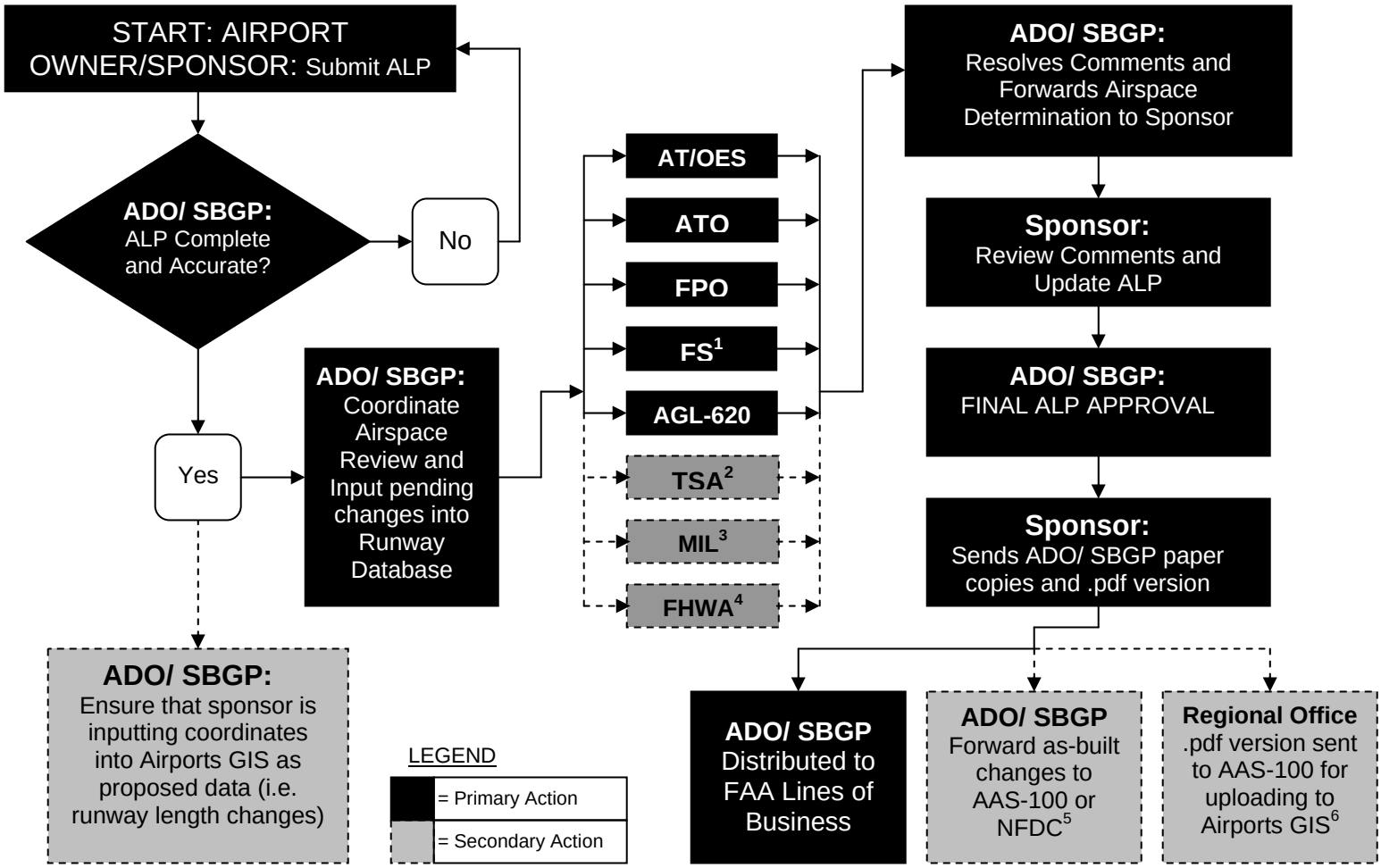
Airport Layout Plan Drawings					
	Sponsor/Consultant				FAA
	Yes	No	N/A		
VII. Terminal Area Drawing (p. 134)					
Scale 1"=50' or 1"=100'. Plan view of aprons, buildings, hangars, parking lots, roads					
A. Title and Revision Blocks					
B. Building data table					
1. Structure identification number					
2. Top elevation of structures (AMSL)					
3. Obstruction marking/lighting (existing/future)					
C. Buildings to be removed or relocated noted					
D. Fueling facilities, existing and future					
E. Air carrier gates positions shown, indicated by circles (existing/future)					
F. Existing and future security fencing with gates					
G. Building restriction line (BRL)					
H. Taxiway or Taxilane centerlines designated					
I. Dimensions					
1. Clearance Dimensions between Runway, Taxiway, and Taxilane centerlines and hangars, buildings, aircraft parking, and other objects.					
2. Dimensions of Aprons, taxiways, etc. [Apron/Hangar areas that do not meet dimensional standards of the critical aircraft should be identified and the wingspan/design group of the aircraft that can use that area depicted.]					
J. Property Line					
K. Auto parking (existing & ultimate)					
L. Major airport drainage ditches or storm sewers					
M. Special Use Area (i.e., Agricultural spraying, Deicing/Containment)					
Remarks					
[insert any—field will automatically expand]					

Airport Layout Plan Drawings					
	Sponsor/Consultant				FAA
	Yes	No	N/A		
VIII. Land Use Drawing (p. 134)					
Scale 1"=200' to 1"=600'.					
A. Title and Revision Blocks					
B. Airport boundaries/property, existing & future (fee and easement)					
C. Plan view of land uses by category (Agricultural, Aeronautical, Commercial, Residential, etc.)					
1. On-Airport (existing & future)					
2. Off-Airport (existing & future) [to the 65 DNL Contour at a minimum, if contour known]					
D. Boundaries of local government					
E. Land use legend					
F. Public facilities (schools, hospitals, parks, churches etc.)					
G. Runway visibility zone for intersecting runways					
H. Show off-airport property out to 65 LDN, if available					
I. Zoning Restrictions					
Remarks					
[insert any—field will automatically expand]					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
IX. Runway Departure Surface Drawing (for each runway that is designated primarily for instrument departures, p. 135)					
(AC 150/5300-13,Appendix 2) *40:1 for Instrument Procedure Runways (Scale, 1" = 1000' Horizontal, 1" = 100' Vertical, Out to 10,200' beyond Runway threshold)* *62.5:1 for Commercial Service Runways (Scale, 1" = 2000' Horizontal, 1" = 100' Vertical, Out to 50,000' beyond Runway threshold)*					
A. Title and Revision Blocks					
B. Plan view (existing & future)					
1. Aerial Photo for base map					
2. Runway end numbers and elevation					
3. 50' elevation contours on sloping surfaces (NAVD88)					
4. Depict property line, including easements					
5. Identify, by numbers, all traverse ways with elevations and computed vertical clearance in the departure surface					
C. Profile view (existing & future)					
1. Ground profile					
2. Significant objects (bluffs, rivers, roads, buildings, fences, structures, etc.)					
3. Identify obstructions with numbers on the plan view					
4. Show roads and railroads with dashed lines at edge of the departure surface					
D. Obstruction Data Tables					
1. Object identification number					
2. Description					
3. Object Elevation					
4. Amount of surface penetration					
5. Proposed or existing disposition of the obstruction					
6. Separate table for each departure surface					
Remarks					
[insert any—field will automatically expand]					

Airport Layout Plan Drawings					
	Sponsor/Consultant				**FAA**
	Yes	**No**	**N/A**		
X. Airport Property Map/Exhibit A (p. 136)					
Scale 1"=200' to 1"=600'.					
A. Title and Revision Blocks					
B. Plan view showing parcels of land (existing, future, and ultimate)					
1. Fee land interests (existing and future)					
2. Easement interests (existing and future)					
a. Part 77 protection					
b. Compatible Land Use					
c. RPZ protection					
3. Airport Property Line					
4. Property boundary bearing and distance, if available					
C. Legend – shading/cross hatching, survey monuments, etc.					
D. County/Township/Range and vicinity map					
E. Data Table					
1. Number or letter and area of each parcel or easement					
2. Date property was acquired or property status					
3. Federal Aid project number under which the property acquisition was reimbursed					
4. Type of Acquisition Indicated (i.e. AIP-noise, AIP-entitlement, PFC, surplus property, local purchase, local donation, condemnation, other)					
5. Grantor of property					
6. Acreage					
Remarks					
[insert any—field will automatically expand]					

ATTACHMENT C. ALP Coordination



Responsibility:

SPONSOR: Develops and Submits ALP for review and approval with the ADO/BSG. They also use the Airports GIS Portal to create an ALP project for data uploading.
AIRPORTS DISTRICT OFFICE (ADO)/ STATE BLOCK GRANT PROGRAM (SBGP): Review for airport design standards, coordinate the ALP with the program divisions, resolve concerns or non-concurrence actions and represents the FAA position to the Sponsor.
Air Traffic Obstruction Evaluation Service (AT/OES): Airspace evaluation and effects of proposals on the control of air traffic.
Service Area Technical Operations (ATO/Tech Ops): Effects of proposed and future development upon existing and proposed air traffic control and navigation facilities, confirm the location of all existing and planned FAA facilities, highlight known or anticipated frequency management problems and validate ATCT Line Of Sight analysis.
Flight Procedures Office (FPO): Impact to proposed and existing instrument flight procedures.
Flight Standards Division (FS): Determine if flight operations can be conducted safely and in accordance with applicable criteria and standards[1]
Transportation Security Administration (TSA): Compatibility with security requirements.
Military (MIL): Compatibility with military requirements.
AGL-620: Compliance with FAR Part 139, siting of ARFF and fueling facilities, runway safety areas, lighting, marking, signage, access and perimeter roads, runway and taxiway geometric layouts and FAR Part 77 penetrations on airport controlled property.

Notes:

1. FS: Submit to FS when the following airport design standards, in accordance to ACs 150/5300-13 and 150/5370-2, are not met; Runway Safety Areas (RSAs), obstacle free zones (OFZs), runway approach surfaces (IAW AC 150/5300-13, Appendix 2), taxiway safety areas (TSA), taxiway object free areas (TOFAs), or penetrations to FAR Part 77 criteria. Also submit to FS proposals for runways, taxiways, and/or apron surfaces underlying the runway approach surfaces (IAW AC 150/5300-13, Appendix 2).
2. TSA: For cases involving security related projects
3. MIL: For cases involving joint use locations or cases in close proximity to military installations
4. FHWA: For cases involving a new airport or change to existing airport property lines, runway extensions or new runways, as prescribed in FAA Order 5000.3D
5. Please see AGL-620 Airport Data Standard Operating Procedure (SOP) for coordination requirements.
6. This is an interim step until the electronic ALP module is available on the Airports GIS portal. The .pdf version of the ALP will be uploaded by the FAA Airports GIS Team and available on the Airports GIS portal for the airports and FAA's use.