**620-03: STANDARD HANDOUT FOR PREDESIGN CONFERENCE**

 **BACKGROUND:**

The predesign conference is an opportunity to discuss project issues related to acceptable design parameters, environmental considerations, airport safety considerations, project coordination, and construction phasing. This conference establishes the limits of Airport Improvement Program (AIP) participation. A predesign conference is generally held for all projects. Hold the predesign conference prior to formally establishing the scope of services for the consultant. This predesign conference agenda is a supplement to Advisory Circular (AC) 150/5370-12, Quality Management for Federally Funded Airport Construction Projects, current version.

The magnitude and complexity of the project will be a factor in who will attend the predesign conference. In general, the airport sponsor, their engineering consultant, and the Federal Aviation Administration (FAA) Airports District Office (ADO) project manager will attend the predesign conference. Other attendees that may be invited include FAA Air Traffic Organization (NAS Planning Team, Technical Operations [Tech Ops], Engineering Services, Flight Procedures Team [FPT], Runway Safety), FAA Airport Certification Inspector (for Part 139 certificated airports), FAA ADO Planner, FAA ADO Environmental Specialist, and airport operations personnel.

**GUIDANCE:**

The following guidance should be used for pre-design conferences on AIP development and equipment projects in the Northwest Mountain Region.

The content is intended to provide an opportunity to talk about major items that could drive the scope/schedule/budget.

This discussion is intended to include design and construction (where applicable).

The outline is developed around traditional design-bid-build project delivery but should be tailored to your specific project; much of the content remains relevant no matter what project delivery method is used. Note that due to project timelines related to the coordination aspects suggested in this guidance, action may be required prior to the development project design beginning and the official predesign meeting occurring. Long lead-time issues are highlighted in bold in the document to call the reader’s attention to them.

***Special Note:*** To access the most current Regional Guidance, please visit the [ANM Sponsor Guide](https://www.faa.gov/airports/northwest_mountain/sponsor_guide/) website: [*https://www.faa.gov/airports/northwest\_mountain/sponsor\_guide*](https://www.faa.gov/airports/northwest_mountain/sponsor_guide).

**AGENDA:**

This should include, but is not limited to, the following sections as needed:
Grant

1. [Project Overview](#ProjectOverview)
2. [Funding](#Funding)
3. [Consultant Procurement](#ConsultantFees)
4. [Grant Application](#GrantApplication)
5. [Disadvantaged Business Enterprise (DBE)](#DisadvantagedBusinessEnterprise)
6. [Project Schedule](#ProjectSchedule)
7. [Project Closeout Requirements](#ProjectCloseoutRequirements)

Design Phase – Development Project

1. [Applicable Guidance](#ApplicableGuidance)
2. [FAA Project Coordination](#FAAProjectCoordination) within Obstruction Evaluation/Airport Airspace Analysis (OE/AAA)
3. [FAA Airports Division Safety Assessment Process](#AirportsDivisionsSafetyAssesmentProcess)
4. [AGIS Survey Requirements](#AGIS) (AC 150/5300-16/17/18, current versions)
5. [Instrument Flight Procedures (IFP)](#IFP)
6. [Navigational Aids (NAVAIDS)](#NAVAIDS)
7. [Reimbursable Agreements (RAs)](#RAS)
8. [Flight Inspection](#FlightInspection) of Air Navigation Services
9. [Design Phase Specifics](#DesignPhaseSpecifics)
10. [Project Closeout for Design-Only Grants](#ProjectCloseout)
11. Other

Bidding Phase – Development Project

1. [Applicable Guidance](#BPDPApplicableGuidance)
2. [Pre-Bid Meeting](#PreBidMeeting)
3. [Buy American](#BuyAmerican)
4. Other

Construction Phase – Development Project

1. [Applicable Guidance](#CPDP1)
2. [Pre-Construction Conference](#CPDP2)
3. [Construction Management Program (CMP)](#CPDP3)
4. [Contractor Quality Control Program (CQCP)](#CPDP4)
5. [Construction Safety and Phasing Plan (CSPP)](#CPDP5)
6. [Temporary Flight Procedures](#CPDP6)
7. [NAVAIDs](#CPDP7)
8. [FAA/ATO Strategic Event Coordination Form (SEC)](#CPDP8)
9. Notice to Airmen ([NOTAMs](#CPDP9))
10. [Change Orders](#CPDP10)
11. [Federal Contract Requirements](#CPDP11)
12. [Construction Progress Reports](#CPDP12)
13. [Project Closeout](#CPDP13)

Design and Bidding – Equipment Project

1. [Applicable Guidance](#DBEPAPPG)
2. [Equipment Specifics](#DBEPES)
3. [Project Closeout](#DBEPPC)
4. Other

**PREDESIGN CONFERENCE AGENDA**

|  |  |
| --- | --- |
| **Airport:** |  |
| **Location (City/State):** |  |
| **Grant Number(s):** |  |
| **Grant Description:** |  |
| **Date:** |  |
| **Attendees** |  |
| **Sponsor:** |  |
| **Consultant:** |  |
| **FAA:** |  |
| **Other:** |  |
|  |  |

**Grant**

1. **Project Overview**
	1. Project description
		1. Briefly describe project, including major work components and phasing
			1. Distinguish federally funded and non-federally funded work.
			2. Discuss process for design/bid/construction.
				1. Sequencing relative to grants
				2. Anticipated delivery method
			3. Provide sketch(s) as appropriate.
		2. Identify key stakeholders/project team.
			1. Verify consultant has active agreement.
			2. Verify that project is in the scope of a multi-year consultant selection.
	2. Review of the Airports Capital Improvement Plan (ACIP) and Airport Layout Plan (ALP)
		1. Compare scope of project to ACIP
		2. Ensure that it is shown on the ALP.
	3. Project purpose and need.
		1. Justification
		2. Eligibility
	4. FAA Line of Business (LOB) coordination
		1. Airports Geographic Information Systems (AGIS) Survey
		2. Flight Procedures
		3. Reimbursable Agreements
		4. Flight Inspections
	5. Environmental
		1. Ensure proper environmental has been completed or initiated.
		2. Discuss any other items from the environmental process that need to be considered for this project.
2. **Funding**
	1. Project funding sources
		1. Entitlements
		2. State Apportionment
		3. Discretionary

Note: discretionary funding is not guaranteed until receipt and execution of grant agreement that includes discretionary funding.

* + 1. Passenger Facility Charge (PFC)
		2. Other funding sources
		Note: Competitive funding sources should not be planned for in the ACIP. Sponsor should be prepared to ensure project completion without dependence on competitive funding sources.
		3. Local Share
	1. Grant Setup (multi-year, phasing, etc…)
1. **Consultant Procurement**
	1. Scope of work in accordance with AC 150/5370-12, current version, and AC 150/5100-14, Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects, current version. Both ACs speak to activities normally performed during these projects.
	2. Consultant fees must be developed, and accepted by the ADO, in accordance with AC 150/5100-14, current version, to be eligible for federal participation.
	3. Any work performed prior to FAA acceptance is at consultant's/sponsor's own risk.
	4. Sponsor must provide to the ADO sufficient information to review and accept the negotiated fees. At a minimum, this information will include:
		1. Detailed scope of work.
		2. Draft engineering contract.
		3. Consultant fee estimate.
		4. Independent fee estimate (IFE).
		5. Cost analysis comparing estimate and the recommendation that the FAA accept the statement and analysis as evidence of cost reasonableness (see The AIP Handbook FAA Order 5100.38, current version, Table 3-67 Sponsor Requirements for Cost Reasonableness).
		6. Record of negotiations.
	5. The contract must clearly delineate the division of responsibility and authority between the sponsor, the design consultant, and any other parties involved.
2. **Grant Application**
	1. Order 5100.38, current version, lists required documents to include in the application. In addition to those items listed, include the following:
		1. Project sketch
		2. Detailed project narrative and cost breakdown. In cost breakdown, show costs for each major project component (i.e., runway, taxiway, lighting, etc.)
		3. Exhibit ‘A’ (if requested by the ADO)
		4. Sponsor certifications [Airports Forms | Federal Aviation Administration](https://www.faa.gov/airports/resources/forms) The sponsor is responsible for completing and submitting signed Sponsor Certifications as listed below prior to receipt of a grant offer:
3. Sponsor Certification of Disclosure Regarding Potential Conflicts of Interest (required for all grants).
4. Sponsor Certification of Drug Free Workplace (required for all grants).
5. Sponsor Certification of Selection of Consultants (required for all grants).
6. Sponsor Certification of Selection of Consultants (required for all grants).
7. Sponsor Certification of Project Plans and Specifications. (required only for construction and equipment grants).
8. Sponsor Certification of Equipment and Construction Contracts. (required only for construction and equipment grants).
9. Sponsor Certification of Construction Project Final Acceptance. (required only for construction grants).
10. Sponsor Certification of Real Property Acquisition.

(required only for land grants).

1. **Disadvantaged Business Enterprise (DBE)**
	1. In accordance with 49 CFR §26.45, grant recipients for airport planning or development who will award prime contracts with a cumulative value exceeding $250,000 in FAA funds in a federal fiscal year must have an approved DBE Program Plan on file with the Office of Civil Rights (ACR).  An approved plan is valid for all DOT-assisted programs and must remain active until all financial assistance is expended. To maintain program compliance, the sponsor should review their program plan yearly, and submit an amended plan if there are significant changes in the sponsor’s DBE program or the DBE Program Plan does not meet current regulations.
	2. The sponsor’s overall DBE Goals must be submitted to ACR for review by August 1st at three-year intervals.
	3. Verify that it is posted in the “FAA Civil Rights Connect” on-line module.
	4. Ninth Circuit Court of Appeals requires sponsors in Idaho, Montana, Oregon, and Washington to provide sufficient evidence of discrimination or its effects (e.g. Disparity Study) to establish a race-conscious and/or race-neutral DBE program.
	5. Tenth Circuit Court of Appeals does not require sponsors in Colorado, Utah, or Wyoming to provide evidence to establish a race-conscious and/or race-neutral DBE program.
	6. For additional guidance, contact the current Equal Opportunity Compliance Specialist for the ANM Region through the ACR.
2. **Project Schedule**
	1. Develop a project schedule to set milestones for grant accomplishment (see sample project schedule at the end of this document). The schedule should be referenced regularly and updated as the schedule changes.
3. **Project Closeout Requirements**
	1. Review project closeout requirements per Regional Guidance 620-05: Standard Handout for Final Reports including:
	2. Summary of test results (projects with pavement structure greater than $500,000).
	3. Provide a pdf copy of the final FAA pavement design program “FAARFIELD” output for as-constructed pavement.
	4. Updated Airport Master Record (FAA Form 5010). <https://adip.faa.gov/agis/public/#/airportSearch/advanced>
	5. Revised or Updated ALP/Exhibit A Property Map/Sign and Marking Plan.
	6. Non-expendable personal property form (equipment).

**Design Phase - Development Projects**

The design and bidding phase for development projects includes all activities required prior to and including the award of a construction contract. The design phase includes all activities required to accomplish a complete project design, including surveying, geotechnical work, and preparation of plans and specifications, as well as coordination with FAA lines of business. It also includes conducting this Pre-Design meeting in accordance with AC 150/5370-12, current version.

1. **Applicable Guidance**
	1. Project must use the current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects found on the FAA website. <https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf>
	2. If advisory circulars are updated during the course of the project, contact your FAA project manager, and refer to FAA Order 5100.38, current version, for guidance on the timing of Advisory Circular releases relative to project execution.
2. **FAA Project Coordination** **within Obstruction Evaluation/Airport Airspace Analysis (OE/AAA)**

The FAA requires all public use airports to file notice under 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, for projects funded under the Federal grant assistance programs identified in the Applicability paragraph of AC 150/5300-20, Submission of On-Airport Proposals for Aeronautical Study, current version,

The FAA’s Office of Airports is responsible for processing, coordinating with other FAA LOBs, and reviewing all on-airport proposals. The LOBs (and their respective Divisions, Branches, Sections and Units) have varying responsibilities specific to their area of expertise.

2.1 Who needs to file?

* 1. Identify projects that require filing an aeronautical study in OE/AAA by referring to AC 150/5300-20, current version, and/or going to this website: [*https://oeaaa.faa.gov/oeaaa/external/portal.jsp*](https://oeaaa.faa.gov/oeaaa/external/portal.jsp)

2.2 What needs to be filed?

a. On-airport aeronautical studies fall into one of these categories. Note that these case types are captured in AC 150/5300-20, current version.

1. Permanent Construction or Alteration
This type of study applies to any structure, object, earthwork, or other permanent improvement that once constructed, modified, installed, or placed on or above the ground will make permanent changes to the existing topography.

2. Temporary Construction or Alteration
This type of study applies to construction activity within a defined project area and may also include staging areas, construction employee parking, material stockpiles, concrete batch plant, cranes, or drill rigs.

3. Construction Safety and Phasing Plans (CSPPs)
The project’s funding source and its location on the airport determine the requirements to prepare and/or submit a CSPP, and that submittal to the FAA occurs by filing an on-airport aeronautical study with the CSPP attached.

(a). CSPP should be routed as an independent case and as a CSPP component type.

 (b). Refer to Section 9, Design Phase Specifics, for more information about CSPPs.

4. Planning (includes Feasibility Studies).

Feasibility studies are used for permanent construction or alteration, and for temporary construction or alteration. AC 150/5300-20 recommends their use as early as 5 years out, but they could be used for early project coordination as late as the early stages of design as needed. AC 150/5300-20 suggests routing this as a single point for the study, however, it is recommended to use Points of Interest (POIs) even if they are preliminary. See additional discussion in Section 2.3 Timing, Item c, below.

* + - 1. Potential items to be considered in these airspace cases include:
				1. Issues affecting the ATCT Line of Sight (LOS) to the airport movement areas.
				2. Construction projects that may impact FAA facilities.
				3. Work in critical areas or changes to grading near equipment such as VOR, ILS Glide Slope and Localizer, Runway Visual Range (RVR), or any other equipment.
				4. Temporary construction, discussed in in AC 150/5370-2, Operational Safety on Airports During Construction, current version, which include, but are not limited to:

Cranes, concrete pumps, drill equipment, or other equipment taller than typical construction equipment.

Batch Plants, haul routes, staging areas.

* + - * 1. Modification of Standards (MOS).

Conduct OE/AAA review of project and its proposed non-standard condition before approval of MOS that may impact existing or future aircraft operations, instrument flight procedures, navigational aids, or facilities associated, per FAA Order 5300.1, current version. Input airspace case number(s) into MOS Tool in ADIP.

* + - * 1. A safety review through the FAA Airport’s Division Safety Risk Management (SRM) process may require that a Project Proposal Summary be circulated in OE/AAA to various lines of business (see Section 3, FAA Airport Division Safety Assessment Process).

2.3 Timing

* + 1. **The airspace process may take 90 days for each airspace case.**
		2. Complex projects and projects involving runways, taxiways or navigational aids may require filing earlier than 90 days before construction because of the consideration required by LOB reviewers.
		3. Recommend coordinating complex projects and those that require specific consideration by FAA LOBs much earlier in the design process than the point at which the cases typically get submitted when the design is finalized.
			- 1. Where there is a question about project viability that the FAA LOBs need to weigh in on and early coordination with other LOBs is needed, consider inputting airspace cases for temporary and permanent construction as “Feasibility Studies” for early project coordination*.*

Recommend that these Feasibility Studies in OE/AAA follow the level of detail described in AC 150/5300-20, current version, for permanent construction or alteration or temporary construction or alteration, including providing POIs and information for aircraft location and tail heights where appropriate, instead of the one point that is suggested in that AC’s Appendix C, Feasibility Studies, because the FAA LOBs need this more detailed level of information to make their evaluation.

Indicate that it is a Feasibility Study in the Remarks Section.

Explain project background and preliminary nature of submittal in the Remarks Section.

Provide additional detail about the project as an attachment, consider using ANM Early Project Coordination form, or similar outline.

Refer to Feasibility Study in the later final case Remarks Section.

* + 1. CSPP should be routed when it’s ready for LOB review and no appreciable changes are expected. (See section e.3 below)
		2. Encourage the following additional coordination with FAA LOBs who may not have a review role in OE/AAA:
			- 1. Construction projects that may impact FAA facilities—coordinate with ATO NAS Planning and Integration.
				2. Geometry changes at towered airports (Runway Safety and local Air Traffic Control Tower (ATCT).
				3. Airport Sponsor must contact the ATCT Manager and inform them of the project. This outreach should be done early in the design phase and should include information on the approximate dates of construction. The ATCT may initiate an ATO-led SRM evaluation of the proposed change to the end state and/or to the operational conditions on the airfield during construction.

(a) The ATO-led SRM process is done on the 100% design/CSPP because they don’t want to have to revisit it by reconvening the panel if any changes occur.

(b) Because the process is done on the completed design and CSPP, and not sooner, ensure coordination with the ATCT early and often to ensure that consideration is given to their operational needs for the end state facility and during construction.

(c) Projects where direct line of business communication is needed.

1. **FAA Airport Division Safety Assessment Process**

3.1Refer to FAA Order 5200.11, FAA Airports (ARP) Safety Management System (SMS), current version, and FAA SMS Desk Reference, for safety assessment requirements and process. Work with SMS Program Manager as needed.

3.2 Conduct a Safety Assessment for small, medium, and large hub airports where the project has an approval action as listed below:

a. Approval of new or updated ALP.

b. Approval of CSPP.

c. Approval of Modification of Design Standards (MOS).

3.3 Complete a Safety Assessment Screening (SAS) form. Use responses from project airspace review to complete the Safety Impact Checklist.

3.4 If an action will have an impact beyond ARP which warrants further discussion in a facilitated forum, ARP may move forward with doing a SRM Panel.

1. **AGIS Survey Requirements (AC 150/5300-16/17/18, current versions)**

4.1 Review latest AGIS Survey Policy Guidance Letter (PGL), for information about AGIS survey requirements. This is found on the FAA website here: <https://www.faa.gov/sites/faa.gov/files/2022-09/PG_Airport_Geospatial_Survey_Update_2022.pdf>.

4.2 Type of project matters and will determine the applicable workflow in ADIP AGIS Survey module; contact Regional Program Manager for assistance.

4.3 Projects need to account for sufficient timing for the survey process.

4.4 **2 years: All Safety-Critical data features and attributes identified within AC-18B, Chapter 4.1.3. are required to be collected and delivered to the FAA.**

a. Safety Critical including design data (for IFPs): required for all runways with established or planned instrument flight procedures where a threshold, or displaced threshold, location and/or elevation changes by more than: ±1-foot longitudinally (along the runway centerline), ±1-foot transversely (left or right of runway centerline), or ±6-inches vertically from its existing/published position.

b. Safety Critical not including design data (no IFPs): the collection and verification of Safety-Critical data where data was collected that doesn’t involve construction or the need for advanced Safety-Critical data required by the Instrument Flight Procedures Design Team, prior to As-Built conditions being established.

4.5 **1 year: Non-Safety Critical Data** These types of AGIS Survey projects do not involve National Geodetic Survey (NGS) data verification; rather, verification is complete with sponsor submission of the design or as-built data into AGIS Survey indicating the sponsor accepts the data as a true and accurate representation.

1. **Instrument Flight Procedures (IFP)**Instrument flight procedures (IFP) specify standard routings, maneuvering areas, minimum and/or procedural altitudes, and visibility minimums for instrument flight rules (IFR) operations.

5.1 Work with ADO PM to contact Flight procedures team (FPT) to determine if there are any impacts or flight procedure needs for proposed final state as well as to facilitate construction phasing.

5.2 **If a procedure request is needed, coordinate this with FPT 2-3 years ahead of desired publication.**

5.3 IFP requests are initiated by the sponsor through the IFP Gateway. Link: <https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/ifp_form/>

5.4 Flight Procedures Team (FPT) will begin pre-screening process which includes:

a. Do airport standards line up with request?

b. Completing necessary environmental review.

c. Ensuring AGIS survey data is available and sufficient.

5.5 If the request meets FPT requirements it is submitted to the Instrument Flight Procedures Validation Team (IVT) for review and validation after which it goes through the IVT Prioritization team at a national level.

* + - 1. Analyze the procedure request.
			2. Identify possible conflicts (e.g., RA, funding, data, etc.)
			3. Consider procedure implementation timing.
			4. Approve or disapprove the procedure request.
			5. Determine the priority of each request.
			6. ADO Planner completes the IVT Validation request form via the FPT KSN site to ensure request is consistent with the Airports planning. ,
	1. Once the procedure is validated and prioritized, continue to work with FPT in order to ensure that the publication date does not change.
1. **Navigational Aids (NAVAIDS)**

See National Navigation Program website for additional information: [*https://www.faa.gov/about/office\_org/headquarters\_offices/ato/service\_units/techops/navservices*](https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices)

6.1 Contact ATO NAS Planning Team (NPT) to identify ownership and impacts (non-FED/ airport owned or FAA owned). In addition, to look up ownership for facilities, the ADO can access the following FAA ATO resource: Facility Service and Equipment Profile (FSEP) website: <https://technetrmlsb.faa.gov/fsep/>

6.2 If FAA owned, ADO would coordinate with ATO NPT to determine if project will impact existing or proposed NAVAIDs. See Section 7, Reimbursable Agreements (RA).

6.3 If non-FED owned, ADO to contact the FAA Western Service Area (WSA) non-FED Program Implementation Manager (PIM). Refer to the Airports Division Non-Federal NAVAIDS website for the point of contact information and other resources: <https://www.faa.gov/airports/planning_capacity/non_federal>

6.4Refer to Section 7 Reimbursable Agreement, and Section 8 Flight Inspection for additional information related to NAVAIDs.

6.5 If the project requires new or relocated Visual Glide Slope Indicator (VGSI) or Runway End Identifier Lights (REILS), there are specific requirements for these airport visual aids. Refer to Order 8200.1, United States Standard Flight Inspection Manual and AC 150/5340-30, Design and Installation Details for Airport Visual Aids, current version.

6.6 Automated Weather Reporting System (AWOS)

* + - 1. Refer to AC 150/5220-16, Automated Weather Observing Systems (AWOS) for Non-Federal Application, current version, for requirements.
			2. In general, an AWOS III or better may require a Benefit-Cost Analysis.
			3. Coordinate with Service Center Non-Federal Program Implementation Manager (PIM) for commissioning process. See Section 6.3 above related to contacting the Non-Fed PIM.
			4. For AWOS III or better, a reporting contract with Weather Message Switching Center may be needed.
1. **Reimbursable Agreements (RA)**

7.1When do you need a RA?

* 1. Actions that impact ATO facilities. These will require coordination and a subsequent reimbursable agreement. These include but are not limited to:
		+ 1. Runway dimensional changes (refer to guidance including but not limited to: FAA AC 150/5300-13: NAVAID siting criteria Siting Criteria FAA JO 6850.2C Visual Guidance Lighting Systems; FAA JO 6750.16E Siting Criteria for Instrument Landing Systems, current versions.
			2. Airfield grading (physical impacts and impacts to signal in space)

3. Airfield development (impacts to signal in space).

4. Runway lighting projects (Tech Ops has equipment in airport lighting vaults; Runway Visual Range (RVR) and Runway End Light siting in relation to Approach Lighting System (ALS) threshold lights). \

5. Operational impacts (NAVAID shutdowns due to runway closures and work in NAVAID critical areas).

6. Joint investment (Airport Sponsor helps fund existing FAA requirement to accelerate deployment of new equipment).

7. Runway Status Lights (RWSL) (Airports with RWSL often have impacts due to taxiway reconstructions/realignments).

8. Coordinate with ATO NPT to determine if any FAA-owned navigational aids need to be installed, moved, or altered as part of construction or any other evaluation needs to be done based upon the aforementioned list; these efforts to evaluate and take action may require a FAA reimbursable agreement.

b. Installation of VGSI and REILs

c. When a flight inspection is required (refer to Section 8, Flight Inspection).

d. Utilities installation potentially conflicts with FAA owned lines and needs to be reviewed.

7.2 The Process for an RA

a. **Coordinate with NPT on projects 3 years in advance to ensure ATO can adequately plan for resources.**

b. Participate in Discovery Meeting organized by ATO NPT.

c. Sponsor must initiate a reimbursable agreement with ATO NPT

d. If a Sponsor needs a flight inspection (only) RA, they will need to contact Flight Inspection in OKC NLT 4 months ahead of the need for flight inspection to begin development of that RA. Please contact NPT if the Sponsor needs flight check contact information.

e. Typically, two reimbursable agreements are needed. The preliminary engineering reimbursable agreement should be in place at least 24 months in advance of planned construction. The second reimbursable agreement is typically design and construction.

f. Reimbursable agreements require advance payment to the FAA prior to starting work. Any remaining funds at the completion of the project will be refunded to the sponsor.

g. Note that if ATO needs to bid work, NPT requires at least 6 to 8 months in advance to get reimbursable agreement contract in place.

1. **Flight Inspection** **of Air Navigation Services**According to Order 8200.1, current version, Flight Inspection is the quality assurance program which verifies that the performance of air navigation services and associated instrument flight procedures conform to prescribed standards. It can also be described as the operation of a suitably equipped aircraft for the purpose of calibrating ground-based NAVAIDs.

8.1 In accordance with Order 8200.1, current version, all new and revised instrument flight procedures are subject to flight inspection and flight validation requirements, and a commissioning flight inspection is required for all airport lighting systems, including approach lights, REILS, runway lights, and radio control of lights, that support a public-use instrument approach procedure.

a. For information on instrument flight procedures (IFPs), refer to Section 5, Instrument Flight Procedures (IFP).

b. A commissioning flight inspection is required for all new VGSIs with an associated IFR procedure, including circling approaches.

 1. Refer to AC 150/5340-30, current version, for additional information on the flight check requirements and process.

 2. Coordinate with NPT or non-Fed PIM, depending on whether it is federally owned or non-federally owned equipment. See Section 6, NAVAIDS and Section 7, Reimbursable Agreements.

c. Other Airport Visual Aids need to be considered for a flight inspection as well. Airfield lighting types such as runway edge lights are listed in Order 8200.1. The need for those inspections must be discussed with Western Service Area Flight Procedures Team (WFPT), and if needed, paid for using a RA. Coordinate with NPT. Refer to Section 7, Reimbursable Agreements (RA).

1. Note that existing airfield lighting installations that are being replaced in-kind at these airports with instrument flight procedures may or may not require a flight inspection, depending on whether an existing flight inspection report is on file.

d. Order 8200.1, current version, Chapter 4, Item 3, Commissioning, also mentions runway painting being completed prior to flight inspection. Coordinate with NPT for project requirements.

8.2 The commissioning flight inspection is done through a reimbursable agreement (see Section 7 Reimbursable Agreements), and requires advance payment to the FAA prior to starting work. Scheduling of the flight inspection will be handled under the reimbursable agreement.

1. **Design Phase Specifics**

9.1 Soils Investigation and Evaluation

 Conduct a soils investigation and evaluation in accordance with AC 150/ 5320-6, Airport Pavement Design and Evaluation, current version*.*

9.2 Local Construction Environment

a. Material Availability/Properties

* + - 1. The engineer should investigate the local availability and properties of construction materials. This includes contacting potential material suppliers to determine if sufficient material will be available for the project. Consider cement availability in accordance with FAA Engineering Brief 106, Guidance for the Implementation of Changes in Industry Cement Standard Specifications.
			2. Consider use of state highway materials where appropriate. Refer to AC 150/5100-13, Development of State Aviation Standards for Airport Pavement Construction and AC 150/5370-10, Standard Specifications for Construction of Airports, current versions.

b. Testing Availability

1. Marshall vs. Gyratory Method

2. Hamburg Wheel vs. Asphalt Pavement Analyzer (APA)

9.3 Pavement Classification Rating (PCR).

a. Review Advisory Circular 150/5335-5, Standardized Method of Report Airport Pavement Strength – PCR, current version, for Pavement Classification Rating (PCR) reporting requirements.

1. Airport Sponsor Letter on AC/150-5335-5, Standardized Method of Reporting Airport Pavement Strength – PCR, dated April 29, 2022, states that the FAA requires that all airport sponsors/operators assign gross weight and PCR data to airport pavements as part of projects funded with federal grant monies that include pavement management, rehabilitation, or reconstruction. This data will be reported in the Airport Master Record. (For statewide pavement management programs, the matter of generating PCRs will be considered on a case-by-case basis when scoping these efforts).
Note this exemption taken directly from AC 150/5335-5, current version: “The use of the standardized method of reporting pavement strength applies only to pavements at public use airports with bearing strengths of 12,500 pounds (5,700 kg) or greater. The method of reporting pavement strength for pavements of less than 12,500 pounds (5,700 kg) is to only report the gross weight and gear configuration of the aircraft that can be accommodated.” <https://www.faa.gov/documentLibrary/media/Advisory_Circular/Airport-Sponsor-Letter-on-AC-150-5335-5D-PCR-Reporting.pdf>

2. Effective with the publication of AC 150/5335-5, current version, the FAA requires all public use paved runways at all 14 CFR Part 139 certificated airports to be assigned gross weight and PCR data by September 30, 2024. This due date was updated to November 28th, 2024, with an airport sponsor letter posted on AC 150/5335-5 website. Where the AC 150/5335-5, current version, requirements require reporting, the airport will update the appropriate Airport Master Record/Form 5010 data elements.

9.4 Non-Standard Conditions

a. Non-standard conditions related to the project and affected areas must be evaluated. When the project involves work on a runway, for example, consider the runway environment as well. Discuss if the non-standard conditions can be fixed in the project or if they may require a Modification of Standards (MOS) or separate non-standards conditions evaluation.

b. Use current version of applicable FAA Advisory Circulars. Any MOS must be approved by FAA through the AGIS MOS Tool.

c. FAA Order 5300.1, current version, outlines the process and requirements for submitting a MOS. Allow at least 90 days for FAA review and coordination of a MOS.

d. A design MOS requires prior airspace coordination, direct coordination with Flight Standards, and is subject to the Airports Division SRM process (see Section 3(j) for more information).

e. Existing non-standard conditions to remain, may require a non-standards conditions evaluation and not a MOS.

9.5 RSA Determinations

a. Consider whether this will need to be prepared in accordance with FAA ARP SOP 8.00, [Standard Operating Procedure for Runway Safety Area Determination](https://www.faa.gov/sites/faa.gov/files/airports/resources/sops/arp-sop-800-RSAD.pdf).

9.6 Revised Sign and Marking Plan

a. For Part 139 airports, a revised Sign and Marking Plan from the Airport Certification Manual (ACM) must be submitted to the ADO project manager for approval by the certification inspector prior to project bid. The Sponsor should contact their certification inspector to update the ACM with the revised Sign and Marking Plan.

9.7 Plans and Specifications

a. Prior to advertising, submit the following as a package for FAA review:

1. Bid Documents, including plans and specifications.

2. Engineer’s Design Report.

b. Ensure bid documents include current Federal Contract Provisions, Federal Wage Rates, and Buy American Provisions.

9.8 Construction Safety and Phasing Plan (CSPP)

a. Refer to AC 150/5370-2, current version, and Airports Standard Operating Procedures (SOPs) 1.00, FAA Evaluation of Sponsor's Construction Safety and Phasing Plans Funded by the AIP or PFC Programs, for information on projects for which there is a need to prepare and submit a CSPP.

b. Provide a CSPP in accordance with AC 150/5370-2, current version. The final CSPP must be approved by the FAA.

 1. Submit a pdf copy of the CSPP to the ADO project manager for review. Refer to Section 2, FAA Project Coordination within Obstruction Evaluation/ Airport Airspace Analysis (OE/AAA), regarding the need to submit the CSPP as an airspace case.

d. Refer to Section 3., FAA Airport Division’s Safety Assessment Process, for SRM requirements.

e. Discuss timing of submittal with ADO PM related to coordination with other FAA lines of business. ATO can call for an SRM panel related to operational considerations during construction and would be basing that effort on the final CSPP. See also the discussion about this in Section 2, 2. FAA Project Coordination within Obstruction Evaluation/Airport Airspace Analysis (OE/AAA).

9.9 Security

a. The airport must meet any Transportation Security Administration requirements in accordance with 49 CFR part 1542. Items exceeding the minimum requirements of 49 CFR part 1542 are not eligible for AIP funds.

9.10 Engineer’s Design Report

a. Review the Engineer’s Design Report requirements in Order 5100.38, current version, Table 3-20.

b. Review Northwest Mountain Regional Guidance 620-04: Standard Handout for Engineer’s Design Report for recommended report contents and format.

**10. Project Closeout for Design-Only Grants**

a. Perform project closeout in accordance with regional guidance 620-05, Standard Handout for Final Reports.

**11. Other**

a. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Bidding Phase – Development Projects:**

The bidding phase includes all activities required to support the bidding process and the award of the construction contract that were not addressed in the design phase.

**1.** **Applicable Guidance**

a. Project must use the *Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects* list found on the FAA website. <https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf>

b. If advisory circulars are updated during the course of the project, contact your FAA project manager, and refer to FAA Order 5100.38, current version, for guidance on the timing of Advisory Circular releases relative to project execution.

**2. Pre-Bid Meeting**

1. Conduct pre-bid meeting in accordance with AC 150/5370-12B, current version.
	* + 1. **Buy American**

a. Ensure that Build American, Buy American requirements for construction projects have been met by the contractor.

* + - 1. Note that temporary products used to support the completion of a project are not subject to FAA Buy American requirements. Only the components and subcomponents required to complete the final assembly should be included.
			2. Note as well that applicants must certify in the Federal Contract Provisions section of the airport sponsor’s procurement that the project bid is or not 100% composed of domestically sourced iron, steel, manufactured products, or construction materials. If the project is not 100% domestically sourced, the applicant must contact the FAA within 15 days of becoming the winning bidder, to seek the appropriate waiver.
1. **Other**
	1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Construction Phase – Development Projects:**

The construction phase includes all activities required after the award of a construction contract and this includes continued coordination with FAA lines of business as needed. The sponsor must provide and maintain competent technical supervision at the construction site throughout the project to ensure the work conforms to the plans, specifications, and schedules approved by the FAA for the project. Refer to AIP grant Assurance No. 17, Construction Inspection and Approval. The sponsor must provide adequate construction quality assurance inspection for all stages of work. This includes adequate documentation of the quality assurance results and reporting on the contractor's work progress.

**1.** **Applicable Guidance**

1. Project must use the *Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects* [list](https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf) found on the FAA website. [*https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist\_0.pdf*](https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf).

If advisory circulars are updated during the course of the project, contact your FAA project manager, and refer to FAA Order 5100.38 current version, for guidance on the timing of Advisory Circular releases relative to project execution.

1. Refer directly to AC 150/5370-12, current version, and AC 150/5100-14, for additional construction phase guidance.
2. Refer to FAA Form 5100-129, Construction Project Final Acceptance – Airport Improvement Program Sponsor Certification for requirements that will need to be met in order for the Sponsor to certify final acceptance.

**2.** **Pre-construction conference**.

a. Hold prior to construction activities commencing in accordance with AC 150/5370 Quality Management for Federally Funded Airport Construction Projects, current version.

**3.** **Construction Management Program (CMP)**

a. Sponsor to prepare a CMP, which is required when the cost of the pavement structure (including subgrade, base courses, and surface courses) exceeds $500,000. The ADO project manager may require the sponsor to provide a CMP for paving projects less than $500,000. The CMP must be submitted prior to the start of construction. See AC 150/5370-12, Quality Management for Federally Funded Airport Construction Projects, current version, for CMP requirements, including a sample plan. The CMP is a separate document from the Contractor Quality Control Program required by AC 150/5370-10.

**4.** **Contractor Quality Control Program (CQCP)**

* + - * 1. Contractor to prepare a CQCP and a conduct a Quality Control/Quality

Assurance workshop in accordance with AC 150/5370-10, current version, Item C-100. That specification states that for federally funded projects over $500,000 where paving is the major work item, a (CQCP) is required, and a Quality Control/Quality Assurance workshop must be conducted. (It is strongly encouraged that a CQCP be developed for all projects.)

* 1. Incorporate adequate time for review of the CQCP. Submittal of the written CQCP prior to the CQCP Workshop will allow for the engineer’s review and a detailed discussion of the requirements before the NTP is issued. Adequate time should be allowed for the CQCP to be a supplement to the Owner’s Construction Management Plan (CMP).

**5.** **Construction Safety and Phasing**

a. Contractor to prepare a Safety Plan Compliance Document (SPCD). The Airport Sponsor must review and approve an SPCD in accordance with AC 150/5370-2, current version.

b. Notify FAA ADO PM if any major changes occur - resubmit CSPP into OE/AAA for review as needed.

c. Changes could require reconvening ATO SRM panel – coordinate with ATO as needed.

**6.** **Temporary Flight Procedures**

a. Coordinate any needed for construction phasing – development requires long lead time. See Section 5, Instrument Flight Procedures (IFP).

**7.** **NAVAIDs**

a. Coordinate any needs for shutdowns or temporary facilities during construction with ATO – may require RA – see section above.

**8.** **FAA-ATO Strategic Event Coordination (SEC) Form**

a. Submit the SEC Form to the Western Service Area e-mail address on the form at least 45 days in advance of any runway closure. The form can be found on the OE/AAA website.

b. Significant impacts to the NAS due to airport projects require submittal and coordination of the SEC Form.  Any event listed below that causes a closure of 4 hours or greater for consecutive days, or a causing a closure greater than 24 hours requires the submission.

c. Events at large hub airports (DEN, PDX, SEA, SLC) requiring SEC Form submittal:

1. Partial or full runway or taxiway closure.

2. Temporary shutdown of NAVAIDS.

d. Events at all other airports requiring SEC Form submittal:

1. Partial or full runway closure.

2. Temporary shutdown of NAVAIDS.

**9.** **NOTAMs**

a. Airport Construction Notice (through NOTAM Manager) – where applicable: [*https://www.faa.gov/air\_traffic/flight\_info/aeronav/aero\_data/apt\_constr\_notices/*](https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/apt_constr_notices/)

b. File other NOTAMS related to construction activity as required.

**10.** **Change Orders**

a. Coordinate change orders, when possible, with FAA project manager prior to implementation because it is the Sponsor’s risk if the eligibility is determined afterwards.

**11.** **Federal Contract Requirements.**

a. Ensure the contractor meets federal contract requirements, including but not limited to:

b. Sponsor/consultant to perform payroll review to ensure contractor is compliant with federal regulations.

c. Sponsor/consultant to verify that the contractor has Davis-Bacon Act and other federally required posters in place.

**12.** **Construction Progress Reports**

a. Sponsor and their consultant to maintain FAA Form 5370-1, Construction Progress and Inspection Report, or a form that provides equivalent information during construction and submit to ADO at predetermined intervals.

b. If problems occur may need to submit at more frequent interval and/or lift off page information for the ADO.

c. Use of this form is not mandatory, and the sponsor may prepare and use customized forms. A copy of Form 5370-1 is included in Appendix B of AC 150/5370-12, current version. Form 5370-1 is available for download at the FAA Airports website: [*https://www.faa.gov/airports/resources/forms*](https://www.faa.gov/airports/resources/forms)*.*

**13.** **Project Closeout**

a. Review ANM closeout documentation requirements for quality assurance data reporting and consider tracking it during construction. Be prepared to submit it as needed during the project if questions or issues arise.

b. Perform project closeout in accordance with regional guidance 620-05, Standard Handout for Final Reports.

**14. Other**

a. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Design and Bidding Phases - Equipment Projects**

The design and bidding phase for an equipment project includes all activities required prior to and including the award of an equipment contract. The design phase includes all activities required to accomplish a complete project design, including preparation of plans and specifications, as well as coordination with FAA Certification Inspectors for Part 139 Airports. This meeting is in accordance with AC 150/5370-12, current version. Conduct a pre-bid meeting as appropriate. Other support following bidding may be included in the scope, as needed.

* + - 1. **Applicable Guidance**

a. Project must use the *Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects* found on the FAA website. <https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf>

b. If advisory circulars are updated during the course of the project, contact your FAA project manager, and refer to FAA Order 5100.38, current version, for guidance on the timing of Advisory Circular releases relative to project execution.

1. **Equipment Specifics**

a. Aircraft Rescue & Fire Fighting (ARFF) Vehicle

1. The size of the ARFF vehicle is determined by airport index under Part 139. Follow AC 150/5220-10, *Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicle*, current version, for requirements and specifications.

2. Auxiliary equipment must be pre-approved and procured separately.

b. Snow Removal Equipment (SRE)

1. For Part 139 airports, the certification inspector will help determine the type of equipment needed at the airport and include in the airport’s Snow and Ice Control Plan. Follow AC 150/5220-20, *Airport Snow and Ice Control Equipment*, and AC 150/5200-30, *Airport Field Condition Assessments and Winter Operations Safety*, current versions, for requirements.

2. For non-Part 139 airports, refer to Order 5100.38, current version, for eligibility requirements.

**3.** **Project Closeout**

a. Perform project closeout in accordance with regional guidance 620-05,

 Standard Handout for Final Reports.

1. **Other**

a.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**AIRPORT IMPROVEMENT PROGRAM (AIP)**

**PROJECT DEVELOPMENT SCHEDULE**

|  |  |
| --- | --- |
| **Airport:** |  |
| **Location (City/State):** |  |
| **AIP Grant Number:** |  |
| **Grant Description:** |  |

|  |  |  |
| --- | --- | --- |
| **ITEM** | **DATE** | **COMMENTS** |
| **ESTIMATED** | **ACTUAL** |
| **1. Environmental Documentation Submitted** |  |  |  |
| **2. Environmental Documentation Approved** |  |  |  |
| **3. Scope of Work and Record of Negotiations Submitted to FAA** |  |  |  |
| **4. Consultant Fees Accepted by FAA** |  |  |  |
| **5. DBE Plan and Goals Submitted to Civil Rights (if applicable)** |  |  |  |
| **6. Sponsor submits Grant Application (s)**  |  |  |  |
| **7. Construction Safety and Phasing Plan Submitted for Airspace Review** |  |  |  |
| **8. Modification of Standards Submitted** |  |  |  |
| **9. Draft Plans, Specifications, and Design Report Submitted for FAA Review** **(indicate milestones for deliverables)** |  |  |  |
| **10. Plans/Specifications/Design Report returned to Sponsor w FAA Comments****(indicate milestones for deliverables)** |  |  |  |
| **11. FAA Accepts Plans and Specifications**  |  |  |  |
| **13. Advertising Date** |  |  |  |
| **14. Bid Opening Date** |  |  |  |
| **15. Recommendation of Award and Bid Tab Submitted by Sponsor** |  |  |  |
| **16. Grant Issued** |  |  |  |
| **17. Notice to Proceed Date** |  |  |  |
| **18. Substantial Completion Date** |  |  |  |
| **19. Final Inspection** |  |  |  |
| **20. Airport Facility Diagram Updated** |  |  |  |
| **21. Grant Closeout Submitted to FAA** |  |  |  |