

Recommended Plan Set Content

FAA Central Region Airports Division

General

The engineering consultant shall apply sound engineering judgment and best practices when determining the content of a project specific drawing package. Generally, the design engineer should only incorporate the graphical detail necessary to adequately describe the work and the site elements that may impact the work. Whenever possible avoid duplication, excessive graphics and unnecessary detail.

The following represents suggested project drawings and content. The size and complexity of the project will influence the extent of the drawing package. The design engineer may find it more suitable for their project to combine some of the listed drawings. While this guidance is not mandatory, it does represent best practices for an airfield project.

Cover Sheet

- a. Airport Name
- b. Airport Location
- c. Owner's/Sponsor's Name
- d. AIP Project Number
- e. Brief Description of Project
- f. Location/Vicinity Map
- g. Date
- h. Professional Stamp/Seal

General Information Sheet

- a. Index of drawings
- b. Schedule of quantities
 - Separately delineate AIP quantities from non-participating quantities.
- c. Legend, symbols and abbreviations.
- d. Points of Contact (Operations, Utilities, FAA Technical Operations).
- e. Table of Design Standards (design aircraft, approach category, dimensional values...)
- f. General Notes
- g. Survey Control Information

Project Layout Plan

(Note: The Construction Safety and Phasing Plan (CSPP) is a standalone document that may include the project layout plan as an element. The CSPP serves to address the complete operational safety requirements for the project. The version of the layout plan included in contract drawing set must not conflict with the version in the CSPP.)

- a. General airport layout
- b. Work area site plan
- c. Safety Notes
 - The notes on these drawing may paraphrase select critical safety requirements
 - For all cases, the notes should refer to applicable section of the CSPP for complete airfield operation safety provisions.
- d. Airport access points and security issues
- e. Approved haul route locations
- f. Staging area location and stock pile locations
- g. Graphical delineation of safety areas, object areas, departure surface and obstacle free zone.

Survey and Boring Information

- a. Survey control data table and notes.
 - Identify PACs and SACs
 - Use NAVD 88 datum
- b. Boring Log
 - Core characterization and legend

Construction Phasing Plan

(Note: The Construction Safety and Phasing Plan (CSPP) is a standalone document that includes the construction phasing plan as an element. The CSPP serves to address the complete operational safety requirements for the project. The version of the phasing plan included in contract drawing set must not conflict with the version in the CSPP.)

- a. Graphically delineate limits of work area for each phase
- b. When feasible, provide separate drawings for each phase
- c. List specific work activities per phase
- d. Identify sequence of construction
- e. Identify airfield pavement closures
- f. Indicate temporary threshold relocation/displacement (as applicable)
- g. Graphical delineate limits of safety areas, object free areas, departure surfaces and obstacle free zones.
- h. Include safety notes relevant for specific phase
 - The CSPP addresses the complete operational safety provisions. The notes on these drawing may paraphrase the critical safety provisions but in all cases should refer to applicable section of the CSPP
- i. Indicate temporary marking and lighting as applicable
- j. Show traffic control measures for taxiing aircraft and construction traffic
- k. Indicate barricade locations and access limitations
- l. ARFF access (if applicable)

Demolition Plan

- a. Define limits of removal
- b. Indicate locations for isolation saw cuts
- c. Demolition notes
 - Protection of adjacent pavement, equipment, underground cables and drainage systems
 - Disposition of millings and rubble

Typical sections

- a. Include pavement section details (cross slopes, dimensions and material layer)
 - Callout should identify relevant specification section for each pavement layer
- b. Include transverse grade template
 - Include cut and fill detail, ditch lines and etc.
- c. Define edge drain location
- d. Include edge drop-off detail

Grading Plan

- a. Show surface grade contours (existing and proposed)
- b. Indicate select spot elevations
- c. Indicate location of storm water sewer structures
- d. Provide tabulation of earthwork quantities
 - Identify shrink/swell factor

Plan and Profile Sheets

- a. Note: Plan sheets may be separate from profile sheets
- b. Show geometric pavement layout
 - Stationing
 - References to cross section and details
 - Spot elevations
 - Horizontal curve data
- c. Show profile grade, existing and proposed
 - gradient percentages
 - Vertical curve data
 - Line of sight check
 - Location of underground culverts, duct banks, pipes etc.

Pavement Details

- a. Include joint Plan with detail references
 - May be included with plan sheet
 - Spot elevation of joint intersections
- b. Graphical indicate reinforced panels and details
- c. Include detail for different joint types
 - Use FAA type conventions
- d. Include runway grooving details (as applicable)
- e. Include tie down detail (Apron projects)

Marking Plan

- a. Indicate pavement marking layout
 - Dimensions, color and location
 - Note markings that require a border
- b. Show marking details per AC 150/5340-1k
- c. Include detail for Surface Painted Hold Signs (SPHS)
 - Request each SPHS have it own individual detail

Electrical Plan and Details

- a. Airfield lighting
 - Layout Plan (spacing, location, distance from pavement edge)
 - Light fixture detail (height, grounding, foundation and etc.)
- b. Airfield Signage
 - Sign plan (location, distance from pavement edge)
 - Sign Detail (height, grounding, foundation and etc)
 - Sign schedule (provide thumbnail graphic showing the sign face legend)
- c. Electrical Details
 - Grounding details
 - Trench detail
 - Splice detail
 - Vault details
 - Circuiting plan

Navigational Aids (PAPI, REIL...)

- a. Site layout
- b. Installation details
- c. Aiming information
- d. Obstruction clearance information (e.g. PAPI OCS)

Drainage

- a. Surface and subsurface plan and profile
 - May be combined with plan and profile drawings
- b. Storm pipe
 - Identify flow line elevations
 - Drainage structure and pipe schedule
 - Drainage structure details
- c. Underdrain
 - Installation details
 - Under drain flow path

Miscellaneous

- a. Storm Water Pollution Prevention Plan (SWPPP)
 - Erosion control details and Best Management Practices (BMP)
- b. Fencing plan and Details
- c. Utilities
- d. Cross Sections