



Importance of Design Documents & Your ALP

AGGAA 2nd Annual Conference

Breakout Session #2

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Benesch-Services



Roadway/Bridges



Municipal



Buildings



Railroad



Water Services



Geotechnical



Environmental



Aviation



Value Engineering



**Landscape
Architecture**



Site Development

Importance of Design Documents

- **Plans** – original drawings approved by the Engineer, which are part of the contract and clearly show the following for the proposed work:
 - Location
 - Character
 - Dimensions
 - Details
- **Specifications** – FAA/GDOT required documents that provide instruction on:
 - Project Intent
 - Performance
 - Construction
 - Quality and Standards
 - Installation
 - Testing
- **Engineer's Report** – relevant design information
 - Existing Conditions
 - Historical Data
 - Calculations
 - Design Parameters

Design Plans

- Cover Sheet
- Index/Notes/Summary of Quantities
- Survey/Existing Conditions
- Construction Safety Phasing Plan
- Demolition/Removal
- Grading/Drainage
- Paving/Geometrics
- Marking
- Lighting/Signage
- Erosion and Sediment Control

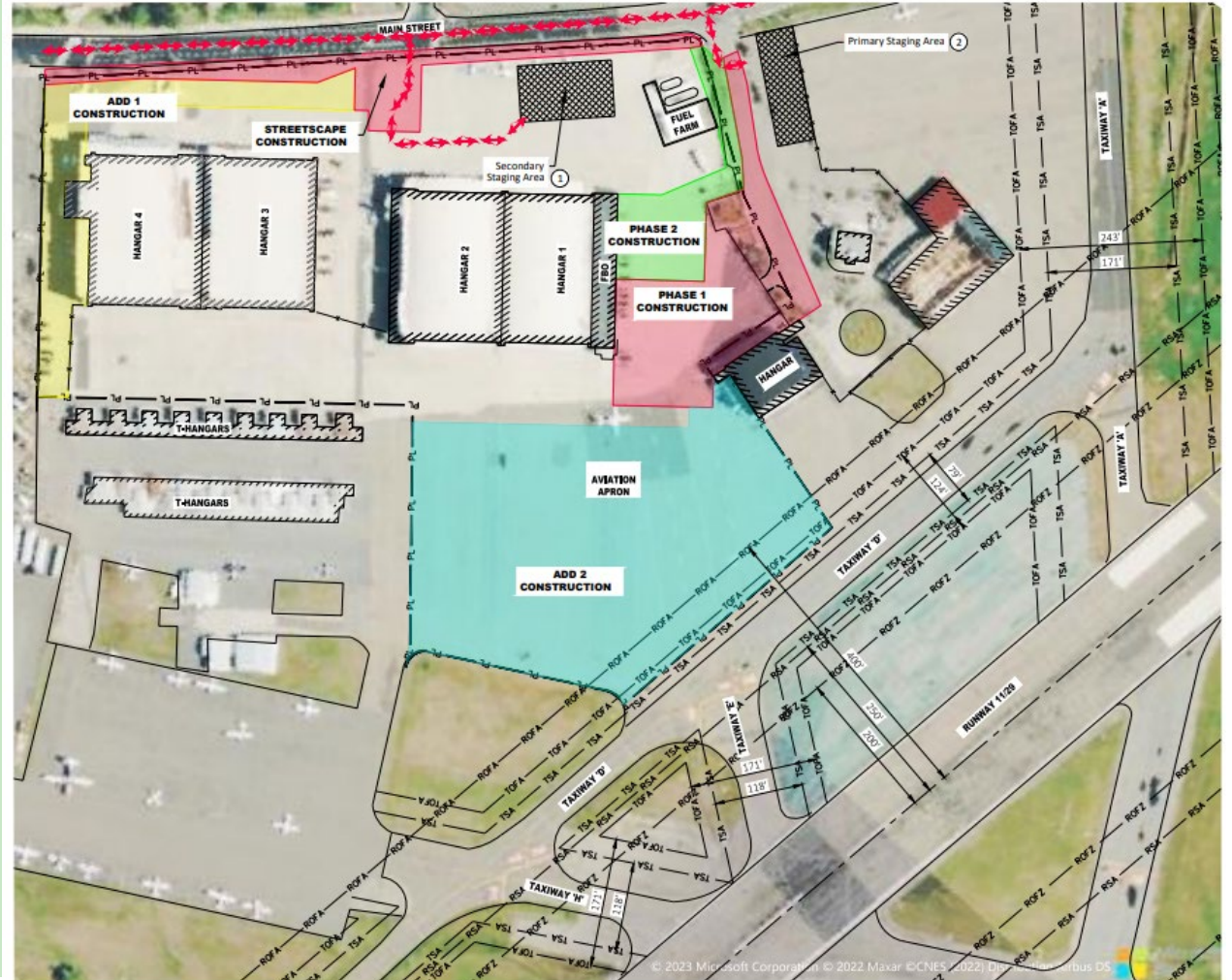
Key Elements

- Representative of project goal
- Easy to understand
- Inclusion in design process
- Sufficient detail

Design Plans – Important Aspects

2 Important Plan Sheets

- **CSPP**
 - NOTAMs
 - Closures
 - Moratoriums
 - Liquidated Damages
 - Calendar Days
- **7460**
 - Temporary
 - Permanent
 - Review by GDOTC



Specifications

FAA AC 150/5370-10H GDOT STANDARD SPECIFICATIONS

- General Contract Provisions
 - DBE
 - Buy American
- Construction Items
 - General
 - Site work
 - Pavement
 - Drainage
 - Lighting
- Appendix
 - Geotechnical Report
 - Others

Key Elements

- GDOT vs FAA vs Consultant
- Modifications
- All items accounted for
- Sealed/Signed

Specifications – Important Aspects

Engineer's Report

- Project Scope
- Design Elements
 - Pavement
 - Drainage
 - Erosion
- Airport Safety
- DBE Participation
- Schedule
- Cost
- Meeting Minutes




Key Elements

- Adequately describe project
- Support the design
- Include alternatives/options

Engineer's Report – Important Aspects

- Applicable AIP Standards
- FAARfield Design
- Hydrology/Hydraulic Designs
- Erosion & Sediment Control BMPs
- Structural Design
- Electrical Calculations

Document

-  Preliminary Investigations
-  Calculations to Support Design
-  Design Elements & Procedure

Importance of Design Documents

- To **develop an Engineered set of drawings** that can be utilized to construct the proposed project to meet state and federal design requirements.
- To **determine the state and federal standards** upon which to build a quality project.
- To **document the design and construction process** for future development and improvement.

Questions?



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