



Capstone Design Project Abstract

Project Title: Athens (AHN) Ben Epps Airport TWY B

Sponsor: RS&H

Team Members: Trenton Word, Ethan Brantley, Jackson Kirkland

Faculty Mentor: Sung-Hee Kim

The members of this team are tasked with designing the extension of Taxiway Bravo and the expansion of the main apron at Athens Ben Epps Airport (AHN). RS&H has tasked the team with producing a comprehensive design package for this project, including pavement removal, geometric layout, earthwork, grading, surface modeling, stormwater analysis and design, airfield pavement design, pavement markings, and erosion and sediment control plans. AHN has been continuously improving and developing over the past few years, with other capstone teams also contributing to this effort. The purpose of this project is to increase taxiing opportunities while enhancing safety and operational efficiency. The airport is located approximately three miles east of downtown Athens and supports general aviation, corporate and business jet traffic, military operations, and limited commercial service. AHN currently has two runways and two parallel taxiways. With the proposed extension, both taxiways will run the full length of the runways. This improvement will enhance operational efficiency and increase safety for all airport users. The project also includes an apron expansion. During busy weekends, the airport experiences high demand for aircraft parking and currently struggles to accommodate all requests. With the apron expansion, fewer aircraft will be turned away or forced to park on grass surfaces. The design team has encountered several challenges in developing the design sheet set, including administrative difficulties with sharing CAD files, stormwater design complexities, grading challenges, and learning the codes and regulations required for airfield pavement design. The team plans to submit a fully comprehensive design sheet set to RS&H and the airport upon completion.