



NicNevol

Engineering Services



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Williston Municipal Airport – Bulk Hangar

Location: 1800 SW 19th Avenue, Williston, FL

Owner: Passero Associates, LLC

Markets: Aviation, Geotechnical Engineering

Services: Electrical Resistivity Imaging (ERI), Subsurface Characterization, Anomaly Detection

Project Description

NicNevol, in collaboration with Geohazards, Inc., performed a geophysical subsurface investigation at the Williston Municipal Airport as part of the design and construction of a new bulk hangar. The purpose of the study was to characterize subsurface conditions, identify potential karst features, and assess the risk of subsidence near the proposed hangar footprint.

The scope of work included a geologic literature review, site reconnaissance, and execution of six Electrical Resistivity Imaging (ERI) traverses across the project site. The investigation was performed in accordance with ASTM D6431, using a SuperSting R8 resistivity meter with a multi-electrode array system.

Results indicated layers of clay and weathered limestone overlying competent limestone. Several anomalies were identified, including zones suggestive of raveling and porous or in-filled limestone, particularly near the southeast corner of the project area. These findings guided further geotechnical exploration and foundation recommendations for the hangar.

NicNevol Responsibilities

- Coordinating geophysical survey with client and subcontractor (Geohazards, Inc.).
- Assisting with site reconnaissance and ERI test layout.
- Reviewing ERI results for potential anomalies impacting foundation design.
- Integrating geophysical findings with geotechnical recommendations.
- Supporting design team with risk assessment for karst-related subsidence.



Project Highlights

- Geophysical field program: 6 ERI traverses with depths of 23–65 ft.
- Equipment: Advanced Geosciences, Inc. SuperSting R8 multi-electrode system.
- Regional geology: Eocene-age Ocala Limestone with karstification risk.
- Anomalies: zones of possible raveling and porous/in-filled limestone.
- Surface feature observed (5 ft dia., <3 ft depth) after heavy rainfall near SE corner.

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Delivering engineering expertise that supports safer, stronger infrastructure.

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