WJE

Martindale AASF Taxiway

Pavement Improvements and Repair Documents | San Antonio, TX



CLIENT

Adjutant General's Department of Texas

BACKGROUND

The existing pavement on the north side of the Martindale Texas Army National Guard airfield apron consisted of 187,000 square feet of approximately 1-1/2-inch-thick asphalt. The north side of the apron was positioned between sections of existing concrete taxiway. Prior to WJE's involvement, the Martindale Texas Army National Guard airfield apron and taxiway accommodated parking for ten UH-60 helicopters on the south side of the apron and ten abandoned helicopter parking areas on the north side. The Adjutant General's Department of Texas retained WJE to perform a preliminary investigation of the proposed site for the improvements to the north side of the apron and to design replacement paving for the north side to provide parking for six additional UH-60 helicopters.





SOLUTION

The north side of the apron pavement was designed as reinforcement concrete slabs-on-grade, and the additional parking was designed as flexible asphalt pavement intended for passenger car use. The pavement for the north side of the apron was designed in general accordance with the requirements of the Unified Facilities Criteria (UFC) Airfield and Heliport Planning and Design (UFC 3-260-01). The design includes lighting for pilot orientation during night time operations. The service life of the new apron pavement was designed to be fifty years, exceeding the required minimum service life of twenty years.

The existing in situ soils were stabilized and compacted. A base course of crushed limestone was added to provide a drainage layer. As a cost-savings effort, the widths of the runway shoulders were reduced to 12-1/2 feet prior to construction. WJE provided construction administration services for the construction of these improvements. The total construction cost for this project was \$1.5 million.



ENGINEERS Architects Materials scientists