

AIR CARRIER APRON RECONSTRUCTION

FORT DODGE REGIONAL AIRPORT | FORT DODGE, IOWA

COST

\$2.85M

COMPLETION DATE

2019

REFERENCE

Rhonda Chambers
Director of Aviation
515.57333881



PROJECT DESCRIPTION

In 2017, the Fort Dodge Regional Airport Commission tasked McClure to perform design, bidding, and construction services for the reconstruction of the Air Carrier Apron. The apron accommodates daily airline operating, provided by SkyWest Airlines and Boeing 737-800 charter operating for Brushy Creek Honor flights.

The existing Air Carrier Apron dated back to 1949 and consisted of severely distressed Portland Cement Concrete serving well beyond its intended life. The pavement created a maintenance headache with foreign object debris (FOD) issues and was plagued by structural-related distresses such as shattered slabs, corner breaks and linear breaks. Preventative maintenance projects performed in 1990, 1994 and 2007 attempted to address FOD related issues, however, the maintenance was no longer cost effective for maintaining the functionality of the apron.

Major elements of the project included the following:

- Full-Depth Pavement Removal
- Earthwork
- Incorporation of a Fly Ash Treated Subgrade
- Preparation of Stabilized and Non-Stabilized Subbases
- 8" and 12" PCC Pavement
- Installation of an Underdrain System
- Pavement Marking
- Seeding, Mulching and Sodding
- Edge Lighting System Relocation

PROJECT HIGHLIGHTS

With every AIP-funded reconstruction project, justification is required for the proposed apron's size and geometric layout. McClure successfully negotiated with the FAA into establishing an agreed upon geometric layout that incorporated the FAA's fillet geometry design, which accommodated frequent Boeing-737 operations and routine commercial airline service operations. As a result of the collaboration between all stakeholders, the Airport received approval on the proposed geometric layout, providing the Airport with an increased apron footprint to accommodate two (2) Boeing-737 simultaneous operations with a fully-functional Air Carrier Apron.

