



UTILITY PROJECT

CIP 14-023 Airport Electrical Improvements Construction

The project was awarded to Rural Electric on August 18, 2015 with a notice to proceed given on August 24, 2015. The project includes demolition of the existing 1940's electrical vault and removal of existing electrical equipment; construction of a new electrical vault, airfield electrical equipment, back-up generator, including all underground conduit, conductor and cable; a new medium intensity taxiway lighting edge lights and lighted signs along Taxiway E; removal and replacement of existing segmented circle and lighted windcone; and new airport lighting and monitoring control system. Additional work includes extending three phase power from Ruger Road and the Well #3 site to the new electrical vault.

Background

The goal of the *PRC Electrical Improvements* project is to replace and/or upgrade failing electrical infrastructure and equipment to increase operational safety at the Prescott Municipal Airport. This project will include the following major components:

- New Electrical Vault and Emergency Back-Up Generator
- New Medium Intensity Taxiway Lighting (MITL) edge lights and lighted signs along Taxiway E
- New Segmented Circle with Lighted Windcone
- New Airport Lighting and Monitoring Control System (ALMCS)

New Electrical Vault and Generator

The existing airfield electrical vault and generator have reached the end of their useful service lives and require replacement. Additionally, the existing location of the electrical vault and generator is not conducive or beneficial for the existing airfield electrical infrastructure and circuit configuration. The airport has designated a new location that would be more beneficial for the current electrical infrastructure and circuit configuration. The new location has also taken into consideration future development alternatives that the City and Airport are currently considering. These potential development projects are identified in the current airport Master Plan.

This project includes a new approximate 1,400 Square Foot (SF) electrical vault to include

the equipment required to power and control the existing electrical infrastructure as well as the equipment that will be required in future electrical projects. New electrical equipment will be included to replace existing equipment that is also outdated, including Airfield Lighting and Control Monitoring System (ALCMS), Constant Current Regulators, (CCR), etc. The new electrical vault will also include an approximate 80 SF control room.

Taxiway E Lighting and Signage

The existing Taxiway E does not currently have edge lighting or lighted signage. The FAA submitted a letter to the City of Prescott, (as a follow-up to a April 15, 2009 Inspection Letter of Certification from Patrick Lammerding), stating that any taxiway parallel to a runway used for air carrier services is required to have edge lighting and lighted signage according to current FAA regulations and standards (FAA AC 150/5340-30G). As the crosswind Runway 12-30 occasionally receives operations from Great Lakes airlines, Taxiway E is in need of receiving electrical upgrades to bring it into compliance with standards. This project will include new Medium Intensity Taxiway Edge Lighting (MITL) and lighted signage. The taxiway edge lighting system design will include at a minimum, new LED taxiway edge lights, isolation transformers, 5kV cable, and new lighted airfield signage.

Segmented Circle with Lighted Windcone

The FAA issued a Letter of Correction on May 30, 2014 in which the existing Segmented Circle was not demonstrating the existing aircraft traffic patterns and the existing grades within the segmented circle area were out of compliance. Furthermore, the existing lighted windcone has reached the end of its useful service life and is in need of replacement. This project will provide a new segmented circle in compliance with the existing traffic patterns and required grading. A new lighted windcone will also be included.

Project Update

Rural Electric is currently mobilizing and starting initial grading and their storm water pollution prevention implementation for the project. The project is scheduled to be completed in early 2016.

Questions concerning the project should be addressed to the Project Manager, Jeff Low at (928)777-1643 or emailed to jeff.low@prescott-az.gov.

Visit: www.prescottroadconstruction.com for additional project information.

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