



Raleigh-Durham International Airport

Morrisville, North Carolina

Terminal 1 and Terminal 2 Recapitalization Project

Raleigh-Durham Airport Authority | 2020 - 2022

Raleigh-Durham Airport Authority and the Transportation Security Administration undertook a recapitalization effort to replace the six existing Explosive Detection Systems (EDS) with new Smiths Detection CTX 9800 machines. The existing Smiths Detection CTX 9000/9400 machines were approaching technical obsolescence.

The recapitalization effort was made across three separate CBIS matrices; the Terminal 1 pod and Terminal 2 South pod consists of 2 machines each and the Terminal 2 North pod consists of four machines. FDRS data was analyzed to determine current and future year baggage screening requirements. This analysis served in conjunction with assessment of the existing systems baggage screening capabilities to determine the throughput requirements through each EDS machine such that the Airports screening demand can be met while conforming to all TSA requirements.

A detailed sequencing plan was developed to replace each machine in such manor that reduced equipment downtime and provided the Airport the ability to continue operations throughout the project.

Modifications and additions to the existing BHS generally included what is necessary to replace the existing EDS machines. These included modifying existing conveyors with quick disconnect connections to support EDS removal and installation, providing Variable Frequency Drive controlled conveyors to the conveyors before and after the EDS machine to accommodate the belt speed of the new CTX 9800 EDS machine, and to provide light curtains upstream of the new CTX 9800 EDS machines for true leading-edge detection.

BNP worked closely with TSA and the Airport representatives through all phases of design, bidding, contract award, construction administration, and testing process to ensure successful project completion.



ASSOCIATES, INC.

BNP PROJECT TEAM

Steve LaPorta, Principal
Cal Trudeau, Project Director
Tony Lensing, Sr. Project Manager
Mitch Ellingson, Project Manager

BHS CONSTRUCTION AMOUNT

US \$2.5 Million

REFERENCE

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SCOPE OF SERVICES

Analysis Study
Conceptual Design
Design Development
Bid Documentation
Construction Administration
Testing & Commissioning