

Item No.:
Meeting Date:

6a_supp
October 7, 2014

PreConditioned Air (PC Air)



Background

- What:
 - PC Air project installed a system of chillers, heaters, and pipes that provide both the heating and cooling to the aircraft from a central plant at the Airport
- Why:
 - Environmental Benefit:
 - Aids in the elimination of carbon dioxide generated by the aircraft APUs equivalent to about 8,000 cars on the road, or 40,000 metric tons of greenhouse gases
 - Economic Benefit:
 - The benefit to the airlines is the potential annual savings of 5 million gallons of jet fuel



Design Schedule

Original

Actual

Start: 06-03-2009

07-19-2009

Finish: 05-10-2010

05-10-2010

- FAA Grant application deadline required Notice to Award by September 13, 2010
- Design schedule accelerated by 6 weeks to meet FAA deadline for a ~ \$22M grant
 - Result, went out to bid with design about 80%
 - Additional Project cost \$14,540,643



Construction Schedule

- Notice of Award 09/13/2010
- Notice to Proceed 11/05/2010
- Original completion 12/11/2012
- Actual completion 05/16/2014
 - Completion delayed by issues with piping design



Budget

May 2010	\$40,600,000	Payback 1.4 years*
Sept 2014	\$55,140,463	Payback 2.4 years*

*Payback calculated on total Port costs excluding \$21.9 million grant.

Cost growth

Regulated Materials	\$ 500,000
Scope changes	\$ 3,500,000
Errors & Omissions	\$ 9,000,000
Schedule Impacts	\$ 1,540,463

Contractor's extended Overhead
Additional Port soft costs



This request

- Final Change Order from Contractor
- Chilled Water Piping
 - Concourse A piping insulation and anchors and guides (Scope Change)
 - Concourse B, C and South Satellite anchors and guides (Replacement)
- Complete 4 gates (S-3, S-16, D-1, and N-6)



Unfinished Gate N-6

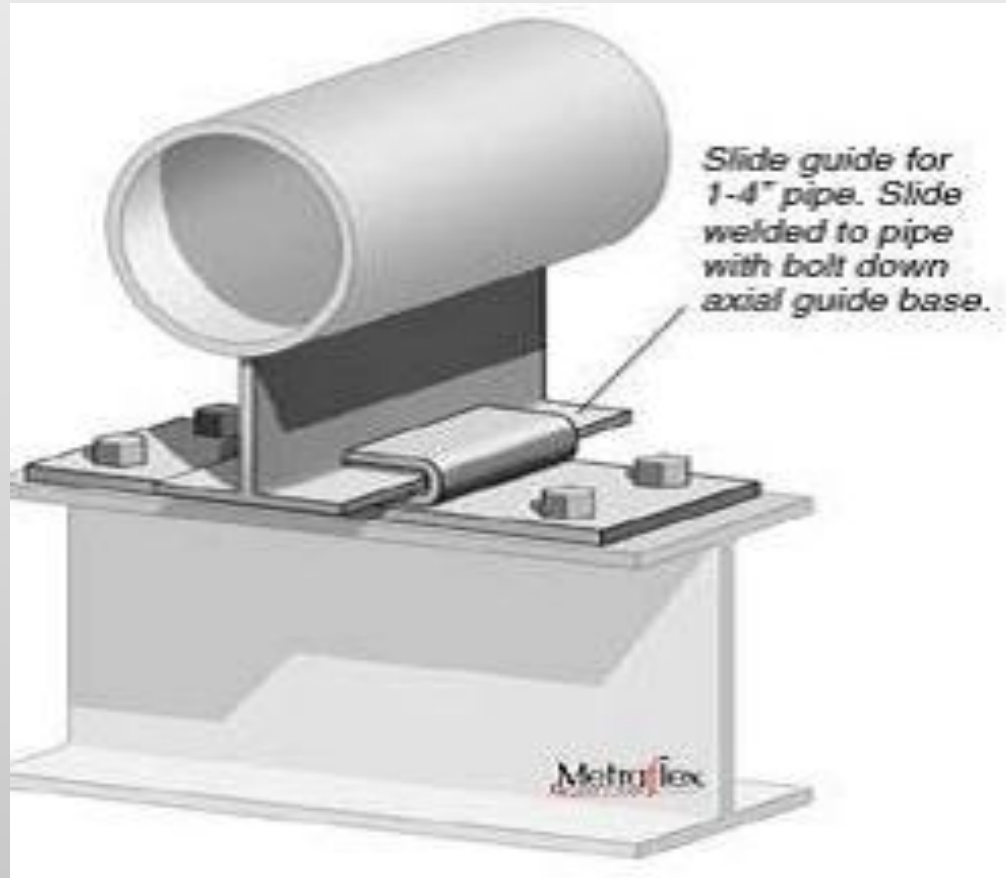


Typical Finished Gate



Solid Guide Illustration

Installed on Concourse A, B, C and South cold water legs



Frosty Pipe Guide

The problem with solid connection on cold water lines



Insulated Anchor Illustration

Recommended to fix icing issue on Concourse A, B, C and South cold water legs



Insulated Pipe Anchors

No ice



Conclusion

- Justification for project still valid. Positive Return on Investment, and rapid payback
- Winner of AGC 2014 Build Washington and ENR Airports/Transit Best Project Awards
- 20 degree chilled water piping requires insulated anchors and guides
- Cost of omissions are project costs

