Laurens County, SC Airport

Airfield Pavement Rehab Project

Lonnie Carroll
Ballenger Paving a Division of APAC-Tennessee, Inc., an Oldcastle Materials Group Company
864-292-9550
lrcarroll@apac.com
Laurens County Airport
Before Construction
Laurens County

• Laurens County Airport Commission
  – Sammy Wham

• Engineer, The LPA Group / Michael Baker
  – Andy Busbee, P.E.
  – 803-254-2211
Initial Bid

• Base Bid plus 3 Additive Bids
  – Base Bid - Runway Overlay
  – Additive Bids - Apron Recon, RW Paved Overrun, TW Rehab

• Base Bid had 2 Pavement Options
  – Concrete (overlay) Section & Asphalt Section
  – 4600 CY of Concrete

• Award of project was based upon Base Bid
Significant Initial Bid Details

• SCDOT spec (min of 4400 psi) substituted for FAA P-501
  – AC 150/5100-13 Appendix 1

• All haul units had to stay off of the runway

• Project Schedule was 65 Days
  – Entire Airport was shut down for 65 days

• Grading of Overrun Area Could Start 30 Days Before NTP.
  – Displaced Runway Threshold 600 Feet
Runway Pavement Sections
Design Section Alternates

Asphalt Section – Alternate B

- 4” P-401 Surface
- P-408 Dbl Surface Treatment
- 8” P-301 FDR

Concrete Section – Alternate A

- 5” Modified SCDOT Spec PCCP
- 3-4” Existing Asphalt
Bid Comparisons Of Low Bidder For Each Option

<table>
<thead>
<tr>
<th>A - Item Numbers</th>
<th>$ Amount For Concrete Option</th>
<th>General Category / Description</th>
<th>B - Item Numbers</th>
<th>$ Amount For Asphalt Option</th>
<th>Percent Difference (A – B) / B * 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>$180,000</td>
<td>Mobilization, Barricades</td>
<td>1 - 2</td>
<td>$126,130</td>
<td>42.7%</td>
</tr>
<tr>
<td>3 - 11</td>
<td>$54,827</td>
<td>Remove &amp; Adjust, Bit Milling</td>
<td>3 - 11</td>
<td>$38,978</td>
<td>40.7%</td>
</tr>
<tr>
<td>12 – 22, 36</td>
<td>$1,329,260</td>
<td>Excavation &amp; PAVING, Markings</td>
<td>12 - 21</td>
<td>$1,573,420</td>
<td>(15.55)</td>
</tr>
<tr>
<td>23 - 32</td>
<td>$73,344</td>
<td>Drainage &amp; Erosion</td>
<td>22 - 31</td>
<td>$63,909</td>
<td>14.8%</td>
</tr>
<tr>
<td>33 - 35</td>
<td>$82,075</td>
<td>Grassing &amp; Topsoil</td>
<td>32 - 34</td>
<td>$147,800</td>
<td>(44.5%)</td>
</tr>
<tr>
<td>37</td>
<td>$772</td>
<td>New Med Intensity Light</td>
<td>35</td>
<td>$950</td>
<td>(18.7%)</td>
</tr>
<tr>
<td></td>
<td>$1,720,278</td>
<td>TOTAL</td>
<td></td>
<td>$1,951,187</td>
<td>(11.8%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Square Yards = 37,420</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$45.97 / SY</td>
<td>Price Per Square Yard</td>
<td></td>
<td>$52.14 / SY</td>
<td>(11.8%)</td>
</tr>
</tbody>
</table>
Apron Reconstruction Pavement
Typical Sections

As Bid - Asphalt Section

4” P-401 Surface
8” Lime Treated Subgrade

New Concrete Section

6” Modified SCDOT Spec PCCP
6-8” Cement Treated Reclaimed Base
Taxiway Pavement Sections

As Bid – Taxiway Asphalt Section

4” P-401 Surface

8” P-301 FDR

New - Concrete Section

5” Modified SCDOT Spec PCCP

3-4” Existing Asphalt
Additional Opportunity to Excel

• Conversion of Overrun Area into Additional 152’ of Runway
  – Additional Lighting
  – Additional Paving on Taxiway
  – Additional Grading and Base
Innovations

• Changing P-501 to Modified SCDOT Spec

• 5 Inch Overlay on the Runway

• Cement Stabilized Reclaimed Base on Apron

• Paving the Runway with a 37.5’ Paver. Allowing Runway to be paved in Two Lanes.

• Closing the Entire Airport.
Construction Photos
Cracks in Asphalt
Construction
Burlap Drag Finish
Five Inch Concrete Overlay
Reclaiming with Cement
Laurens County Airport
Before Construction
Laurens County Airport
After Construction
Silver National Award for Excellence in Concrete Pavement Airport Overlays

- Interstate Sealant and Concrete Inc.
- CMC Americas
- Gomaco Corporation