From: Vincent Dubois, LCPC - FRANCE

To: Carl M. Johnson

Date: August 13, 2007

Re: Detailed information on materials of the project

You can find below the detailed information on materials to study in the framework of our project.

Type of materials: BBSG 0/14 (bituminous concrete)

The granular part is compounded of:
- 20 % aggregates 10/14 from La Noubleau quarry (specific gravity = 2.870),
- 23.5 % aggregates 6/10 from La Noubleau quarry (specific gravity = 2.870),
- 21 % aggregates 2/6 from La Noubleau quarry (specific gravity = 2.870),
- 34 % sand 0/2 from Cusset quarry (specific gravity = 2,720),
- 1.5 % fines from Airvault quarry (specific gravity = 2,720).

The below table shows the granular distribution of the aggregates.

<table>
<thead>
<tr>
<th>Sieve size (mm)</th>
<th>0.08</th>
<th>0.315</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>6.3</th>
<th>8</th>
<th>10</th>
<th>12.5</th>
<th>14</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing sieve (%)</td>
<td>7.6</td>
<td>15.8</td>
<td>28.6</td>
<td>36.4</td>
<td>46.8</td>
<td>58.6</td>
<td>68.5</td>
<td>79.6</td>
<td>92.7</td>
<td>97.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The binder, from Elf petroleum, is a 35/50 grade bitumen. The binder content in the mix is 5.4%.

During the study carried out at the fatigue test track of the LCPC in 1999, 1000 kg of bulk asphalt and six plates 600mmx400mm were sampled. The bulk density have been stored in 30 buckets.

Sincerely yours.

Vincent Dubois.