1.5 Runway Major Rehabilitation and Strengthening

To enable the runway to accommodate larger aircraft on an unrestricted (payload and frequency of trafficking) operational basis the structural overlay work outlined below will provide a PCN of 35/F/D. This will be sufficient to allow the unrestricted use by the largest corporate aircraft currently in service i.e. Bombardier BD-700, Global Express and XRS and the Gulfstream V.

To achieve a PCN of 35/F/D the following bituminous overlay thicknesses will be required.

Runway Chainage (m)	Thickness of Bituminous Overlay (mm)
0 – 840	550
840 – 1090	450
1090 - 1920	250

Ch.0 represents the start of Runway 02.

Ch.1920 represents the start of Runway 20.

It should be noted that the overlay thicknesses shown above provide the required strengthening to the areas shown only and consideration will have to be given to providing a fully CAP 168 compliant runway profile (vertical and transverse curves etc) during the detailed design stage of any major rehabilitation project. It should also be noted that significant accommodation works into the adjacent pavement areas (i.e. ramping etc) will be required as a result of the large overlay thicknesses stated above.

1.6 Indication of Costs of Major Rehabilitation and Strengthening

The following estimate has been developed to provide EFDC with an indication of the likely magnitude of cost for undertaking the above rehabilitation works to Runway 02/20 at NWA. It should be noted that it will be subject to change depending upon other factors i.e. the market conditions prevailing at the time, the procurement route adopted by EFDC etc.



Works Element	Estimated Cost (£)
Runway Strengthening Works	7,500,000
Runway Drainage	150,000
CAT I AGL (including control system) and Simple Approach Lighting to both runway headings	350,000
Estimated Total Rates Cost	8,000,000
Preliminaries (25%)	2,000,000
Contingencies (10%)	800,000
Total Cost Estimate	10,800,000

It should be noted that the above estimate excludes professional fees, VAT, accommodation works into adjacent pavement areas (cross runway, taxiways etc), works within the existing control tower and any works to the existing / new electrical sub-stations required for the upgraded AGL systems. Furthermore, any costs associated with obstacle removal both within the runway approaches and the runway strip have also not been included.

