Design Alignments

NCWedge computes control elevations, profile grades and wedging quantities along a design grade chain referred to as the DG Chain (or virtual chain).

The dg chain may or may not be the same as the Geopak chain on which the loaded cross sections are based. Also, the program allows you to specify multiple Geopak chains to be used as the DG Chain. In other words, you may start your project on the cross section base line, -L- for example, then go into a revised alignment, go back to -L- and then move laterally to yet another alignment. There is no limit on the number of different Geopak chains you can use as your DG Chain.

The **Design Alignments** dialog is used to specify the DG chain for each cross section station.

Select **Set DGN Chain(s)** This procedure uses the NCWedge Browser for easy selection of station ranges and Geopak chains.

After all DG chains are specified, Select **Perform Station LayOffs**. This procedure automatically sets the DG chain station value, region and offsets from the Cross section baseline. The stations and offsets are obtained by a Station LayOff request to Geopak.

Note, that when the DG chain switches from one Geopak chain to another, NCWedge will pause and request the line back and line ahead stations to equate between the two Geopak chains. The requested equation stations are then stored as equalities in the virtual DG chain.