THE CEMENT TREATED BASE PROCESS



BEFORE

AFTER

The Cement Treated Base (CTB) process entails taking the roadway you wish to improve (see before picture above) and grinding the existing roadway surface into pieces less than two inches across. Then the roadway is shaped to where the crown of the road is reestablished at negative two percent. The roadway alignment is not changed and the roadway profile is raised approximately 0.5 feet (6 inches). Once the roadway has been reshaped, cement and water are mixed into the roadway and the surface is graded and compacted . At this point the level of the roadway is approximately one tenth of a foot higher (three fourths of an inch) than the original surface. Three tenths of a foot (approximately three and one half inches) of graded gravel is placed on top of the cement treated base. Then a bituminous surface treatment (BST) is applied to the gravel surface. This entails placing a thin scattering of rock chips and spraying them with oil to hold the rock chips in place. The BST is repeated twice more to provide a wearing surface comparable to the existing surface. Below is a cross section of the roadway depicting the elements of the process.



elevation rate in curve sections



NOT TO SCALE