RESEARCH ON CEAC LONG-LIFE COMPOSITE PAVEMENT

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Summary: Based on the multifunctional long-life pavement design concept, the cold mix cement - emulsified asphalt concrete (CEAC) were applied to compressive stress area (binder course), meanwhile the large-stone asphalt treated base and crushed stone cement base were used for composite base. A three-dimensional finite element model of typical asphalt pavement structure was established for the analysis of its design control parameters, in which the maximum tensile stress and the maximum shear stress were suggested as strength design parameters. Then the long-life composite municipal pavement combination was designed, and the impact factors, which include macro mechanical parameters of pavement materials and thickness of each structural layer, was studied. The combination of long-life composite municipal pavement structure in Yichang was put forward to test road.