

ABSTRACT

This study focus performance of flexible pavement using recycled concrete aggregate (RCA), natural aggregate (controlled), asphalt and fly ash. Marshall Mix Design Method was followed to find out optimum asphalt content (OAC) at desired density correspondence to satisfactory volumetric parameters in accordance to standards. The proportions of fly ash that were used range from 0% (controlled) to 15% with 5.0% interval. Fly ash used as additive material to samples. Recycled Concrete aggregates (RCA) were used from 0% (natural aggregates) till 100% RCA with an interval of 25%. The proportion of asphalt content were from 3.5%, 4.5 and 5.5% of the total percentage of the material (i.e. 1200gms for compacted). On the basis of experimental work during study volumetric data were collected. It can be concluded that RCA can replace to natural aggregate. As the level of RCA increases requirement of binder increased. Fly Ash is used as additive materials in samples. The study suggested that OAC increases with the increase of fly ash. The behaviour of OAC is same for RCA. 10% fly ash is optimum for all cases of RCA for Marshal volumetric properties.