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An Assessment of Groundwater Development Using Pervious Concrete-A Case Study in JSSATE Campus Bangalore

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Abstract: *Pervious concrete is a special kind of concrete with a high porosity that is used for concrete flatwork applications to lessen runoff from a site and facilitate groundwater recharging. Water from precipitation and other sources can directly pass through pervious concrete. Other names for it include porous pavement, permeable concrete, no-fines concrete, and porous concrete. Pervious concrete is made with large particles and minimal to no tiny Aggregates. The concrete paste then coats the aggregates and allows water to pass through the concrete slab. In order to reduce runoff from a site and enable groundwater recharge, pervious concrete is a specific variety of concrete with a high porosity that is used for concrete flatwork applications. Pervious concrete allows water from precipitation and other sources to pass through directly. Porous concrete, permeable concrete, no-fine concrete, and porous pavement are other names for it. Pervious concrete is made with large aggregates with little or no small aggregates. The Environmental Protection Agency (EPA) regards pervious concrete as a means of providing storm water management, pollution reduction, and appropriate development. The development of trees is also enhanced by pervious concrete. The behaviour of pervious concrete has been experimentally explored in the current work. The ratio of water to cement was 0.45. The ratio of coarse aggregate to cement was maintained at varying ratios of 1:4 and 1:6. Half of cement is made of fly ash. Experimental research has been done on a variety of pervious concrete qualities, such as workability and compressive strength tests after 7 and 14 days.*

Keywords: Pervious concrete, Compressive strength, Groundwater development

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