3. **Use of innovative technologies for road, bridge and building construction and maintenance.**

**Introduction**

The Public Works Department executes the construction, improvement, strengthening and maintenance works of roads and bridges. The state, geographically and in terms of population is the country’s largest state. For the state’s industrial, economic and social development, P.W.D. plays a very vital role, acting as a backbone of state infrastructure. In recent time P.W.D. has adopted many innovative, eco-friendly and cost effective measures in construction and improvement of roads & bridges.

**Scope of Work**

In addition to the above new innovative horizons in construction of pavements are being explored some of them are :

1. **Green/Efficient Road Management Network**
   A Green/Efficient Highway is a roadway constructed as per relatively new concept of roadway design that inigrates transportation functionality and ecological sustainability. The result is a highway that will benfit transportation, the ecosystem, urban growth, public health and surrounding communities.

2. **Permeable/Self Draining Roads**
   The permeable pavement system is changing the way of human development with natural enironvent. Its applications towards highways, road shoulders and parking lots are all improvements in water quantity, quality and safety.It enables infiltration of stromwater runoff leading to water conservation unlike traditional impervious pavements allowing stromwater to be wasted. It also makes roads resistant to damages caused by insufficient drainage.

3. **Artificial Aggregates**
   Artificial Aggrgetates are Eco-friendly materials, made up of various kinds of industrial waste like fly ash, blast furnace slag, marble sludge, cement kiln dust etc. As such these materials are pollutants of environment and their disposal is itself a huge problem. Since our natural resources are exhausting at very fast rate, we need to switch over towards more sustainable resource.

Proposals regarding above subjects are invited from various leading Institutions/Consultants/Companies currently working successfully on these or any other innovative subjects being used in India or abroad in order to help the Department for taking initiatives in the respective fields for sustainable development of the state.
Uttar Pradesh State Bridge Corporation is associated with UPPWD and is a specialised agency engaged in the construction of bridges nationally and internationally. The Government is keen to adopt new technologies being used worldover in the field of bridge construction. Innovative concepts in this regard will be appreciated.

Uttar Pradesh Rajkiya Nirman Nigam is associated with UPPWD and is a specialised agency engaged in the construction of buildings nationally and internationally. The Government is keen to adopt new technologies being used worldover in the field of building construction. Innovative concepts in this regard will be appreciated.