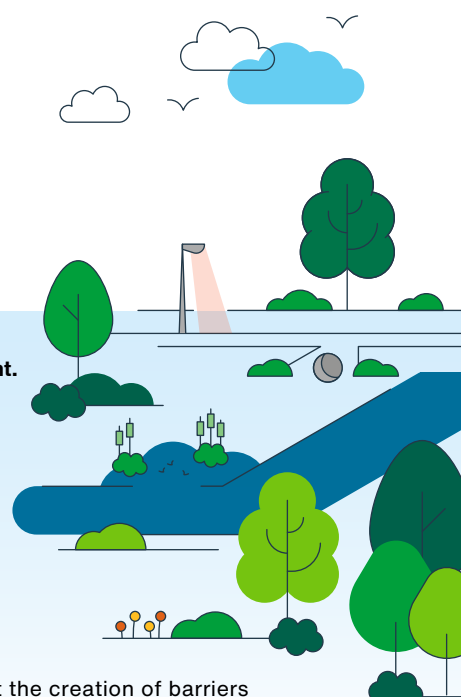


Infrastructure



Our projects offer us opportunities to increase biodiversity and strengthen the natural environment. Ecological Design Principles (EDPs) help designers systematically integrate nature into projects. The EDPs make it possible to create designs that benefit both people and nature in a feasible and practical manner.

Because our projects vary in terms of their phasing and scale, the application and impact of the EDPs also differ. In this series of visualisations, we show how each project can help strengthen the ecosystem through the use of the EDPs.

In respect of infrastructure, this means that the following guidelines apply in practice:

- Avoid building new infrastructure in existing nature areas or green spaces.
- Where development is unavoidable: preserve as many natural structures as possible, prevent the creation of barriers and take advantage of opportunities to strengthen connections between nature areas.
- If barriers arise at ground level, they should be mitigated through the use of wildlife crossings or wildlife passages.



Prevent infrastructure from acting as a barrier to plants and animals, so that they can continue to follow their natural routes (flying, swimming, crawling, jumping) between their habitats. The available options include wildlife crossings, continuous verges beneath tunnels and bridges, exit points along banks with a hard revetment and fish-friendly pumping stations.



Prevent collisions with animals by ensuring that animals cannot stray onto the road, but also by ensuring that they can get off it again safely. Animals are kept off the road by fences or barriers that guide them to wildlife passages. They can safely get off the road using features such as exits points or sloping curbs.



Prevent pollution from infrastructure by implementing measures to prevent disturbances caused by chemicals, light, noise and optical effects. This can be achieved, for example, by installing noise barriers, using embankment infiltration for run-off water, and minimising lighting or deflecting light.



Design roadside verges and ditches as a natural corridor running parallel to the infrastructure and forming a network that interconnects habitats.



Design roadside verges as habitats that provide food and shelter, and favour reproduction. For example, plant native shrubs and flowers as a source of food, and create sheltered spots for animals to rest and nest.



Design roadside ditches as habitats that provide food and shelter, and favour reproduction. This can be achieved, for example, by creating gently sloping banks or planting aquatic vegetation.



Create wetland habitats by combining water storage with natural water features, so that animals can benefit from nutrient-rich and safe wetland environments. This can be achieved by creating temporary floodplains that also act as ecological hotspots.



Work together with other stakeholders to ensure that measures are coordinated, so that connections are set up in the most suitable locations. This can enhance the impact of measures, thereby providing better support for nature and increasing the effectiveness of these efforts.