HOUSTON ZOO

Houston Zoo: Texas Wetlands in the Heart of the Zoo

Houston, Texas



The Houston Zoo's reimagined central zone, complete with a new wetland exhibit to celebrate and inspire local wildlife conservation, is supported by nature-based, sustainable water infrastructure.

SERVICES Engage Assess Engineer & Design s part of an effort to connect communities with wildlife to inspire wildlife conservation action, the Houston Zoo created a 20-year master plan to reconfigure its campus into experiential zones that highlight wildlife and ecosystems found in Texas and around the world. The plan, which was developed by Studio Hanson Roberts, charted the course for creating a more intensive, immersive, and impactful experience for zoo guests, and optimal living environments and support areas for zoo animals and staff.

The first phase of the Master Plan to be executed was the reimagining of four areas of the zoo, including its central hub, the "Heart of the Zoo." Within the Heart of the Zoo, the plan called for a number of campus enhancements, including transformation of the existing, aging duck pond into a more ecologically-relevant Texas Wetland exhibit and the transformation of a café into a signature gathering and dining venue. The Texas Wetland aims to engage visitors in the Zoo's breeding, monitoring, rehabilitation, and release programs with local species of birds, reptiles, bats, and pollinators.

As part of a design team led by Studio Hanson Roberts, Lake Flato, and TJP Engineering, Biohabitats designed a wetlands biological filtration strategy that integrates extensive native plants in both 'live edge' and 'passive edge' treatment wetlands directly into and as a feature element of the Texas Wetlands exhibit. The systems not only function to improve water quality and absorb stormwater from the surrounding areas of the Zoo, but to minimize burden on the traditional mechanical systems charged with maintaining water quality in the extensive exhibit. The project embraces opportunities for Zoo visitors to experience and learn about the natural ecosystems that help protect both habitat for wild animals, and vital water resources in the region. Biohabitats also supervised construction of the wetlands.