

# *Busse Youth Athletic Complex Masterplan*

City of Prior Lake, Minnesota

When the City of Prior Lakes, Minnesota, began planning for a new athletic complex, members of the community raised concerns over potential negative environmental impacts. To address these public concerns, the city's Park and Recreation Department asked AES to conduct an investigation and suggest opportunities to design plans that would be compatible with the sensitive environmental setting. Major concerns were that sensitive wetlands, savannas, and streams could be damaged by park-related fertilizer runoff as well as contamination by deicing materials associated with parking lots and roads. In addition, concerns were expressed about noise and night-lighting that could disrupt sensitive avian communities.



AES conducted a field survey of critical ecological resources, and reviewed the issues and opportunities associated with development of the park. Following these investigations, AES worked with the landscape architects of Brauer and Associates, Hopkins, MN, to design a park plan that integrated and expanded on the existing natural resources within the site, and that complemented the natural resources of adjacent properties.

Rather than designing large areas of high maintenance turf grass which is commonly incorporated into conventional park plans, AES designed all available open space to be restored to native

prairie grasses and wildflowers. In addition, stormwater management plans were designed around a Stormwater Treatment Train<sup>®</sup> concept. These plans were designed and engineered to pre-treat and final-treat runoff from parking lots and soccer fields and ball diamonds, thus reducing the volume and rate of stormwater leaving the land while also reducing nutrients and contaminants that drained from the developed site.

Wetland biofilters and native vegetated swales were installed to convey water over the land rather than through conventionally engineered pipes and stormwater sewers. These wetland biofilters and native prairie grasslands also served as an aesthetic backdrop for the unique park design that incorporates passive recreational nature trails with active recreation areas. This approach to park design was received very favorably by concerned community residents and city and park department staff alike. Considerable construction funds were saved, and the commitment to high quality natural resources and environmental values has been appreciated by the park users.

