

## Kern Center Pond - Project Description and Need

The Kern Center Pond is a regional stormwater management facility that serves the Kern Center Commercial Area (see Figure 1). The commercial area, which is approximately 92 acres in size, is bounded by Hwy 5 on the east and Hwy 36 to the north. Drainage from the Kern Center Pond enters a series of wetlands that drains north through an existing 30" diameter culvert under Hwy 36 and discharges into Long Lake. This project enhances an existing regional stormwater management facility by redesigning the pond into a regional infiltration facility.

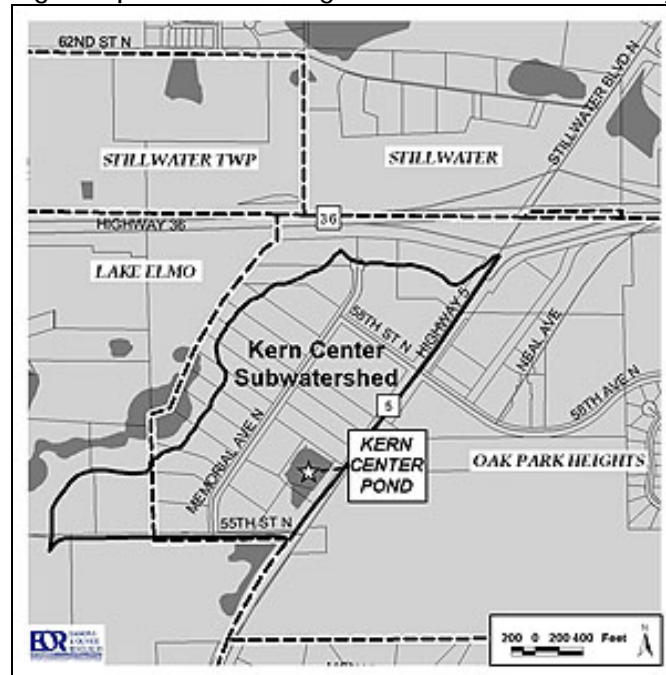


Figure 1. Location Map of the Kern Center Pond

Originally the Kern Center Pond, which was located in Baytown TWP, was a natural depression that was partially landlocked. The overflow for the depression routed excess flows to the south into the Valley Branch Watershed District (VBWD). In 1998, the City of Oak Park Heights annexed the Kern Center Area. Prior to this annexation, an 18" reinforced concrete pipe (RCP) culvert was installed to drain the pond to the west as it does today. In 1998, the 18" culvert was replaced by a 42" pipe restricted by a 12" orifice as part of the utility improvements for the area. According to the Kern Center Commercial Area Drainage Report (February 2002), the 12" orifice restriction was intended to be a temporary measure until outlet modifications to the downstream wetland complex were in place. The City of Oak Park Heights intended to use the downstream wetland complex as a regional ponding facility in order to reduce the peak flow rates under Hwy 36 per the City of Stillwater's Alternative Urban Areawide Review.

In 1999, the Brown's Creek Watershed District adopted Rules and Regulations, which made the use of the downstream wetland complex as a regional storage facility undesirable. While the existing Kern Center Pond was designed to meet the City of Oak Park Heights' stormwater requirements under ultimate development conditions,

it did little to reduce the volume of stormwater being transferred downstream. In an effort to alleviate on-going flooding issues on Long Lake and to reduce the peak flow rates under Hwy 36 to more closely match assumptions made in the City of Stillwater's Alternative Urban Areawide Review, the District decided to pursue modifications to the existing Kern Center Pond.

In 2001, the BCWD was awarded \$25,000 from the Minnesota Board of Water and Soil Resources' (BWSR) Local Water Planning Challenge Grant Program. The objective of the project BCWD Rules Implementation - Demonstration Site Plan was to develop a demonstration site for the education of member communities, developers and citizens regarding the environmental controls and stormwater management standards required by the District's rules.

By 2002, the BCWD had identified the Kern Center Pond as a potential demonstration site for the District's rules. In order to ensure that future development within the Kern Center Commercial Area would meet the District's standards, and that peak flow rates and volumes under Hwy 36 were reduced, the BCWD offered to design the modifications that would achieve these goals. Since this decision was made, the BCWD and the City of Oak Park Heights have been collaborating on the following: development of a Cooperative Agreement; design of the pond modifications; development of an Operation and Maintenance Plan; development of a Monitoring Plan; the construction process. A copy of the signed Cooperative Agreement and construction documents can be found as an attachment to this amendment.

The construction of the Kern Center Pond modifications began in December of 2004. Final excavation and restoration of the site will be completed in the spring of 2005. Modifications to the Kern Center Pond will result in the following improvements: increased storage capacity; pretreatment of stormwater runoff; increased infiltration; and improved wildlife habitat. Since the existing outlet structure will not be modified as a result of this project, there will be no adverse impacts to the downstream receiving water body. Click on image to see large version.

